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ABSTRACT

Information on the Colorado College Plan, students and faculty at Colorado College, and reactions to the Colorado College Plan is presented. The plan is a revised curricular program, a main feature of which is the division of the academic year into nine blocks. Students take one course per block, faculty members teach a single course, and varied learning styles are accommodated. Surveys of faculty and students were conducted during four consecutive spring seasons beginning in 1974. In addition, longitudinal studies during 1973-1979 focused on student's backgrounds, orientations, experiences, learning, and general development; the faculty and their involvements in the instructional program; and the function and operation of the plan and the effect on the institution. The history of the early development of the plan is described, along with nonacademic affairs (e.g., the leisure program, admissions, the library). Information on the characteristics of the student body is presented, along with the results of studies on student changes, faculty attitudes and teaching practices. Appended materials include: a proposal for the establishment of an assessment committee, a list of extracurricular events and attendance, and information on the Omnibus Personality Inventory scales. (SW)

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The Block Plan

A Preliminary Report on a Ten-Year Evaluation of the Colorado College Block Plan Format for Intensive Study

Prepared by Dr. Paul Heist and Dr. Maxwell F. Taylor

November, 1979

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The Colorado College
Colorado Springs, Colorado

The Colorado College Plan is now in its tenth year of operation. Six classes of students have graduated after completing four years of course work under the nine-block calendar. Internal study of the Colorado College Plan was initiated in the first year (1970-71) and was followed by a long-range evaluation under the leadership of Dr. Paul A. Heist of the University of California, Berkeley.

We are pleased to present a preliminary report of this evaluation.

Lloyd E. Worner

Lloyd E. Worner
President

PREFACE

A revised curricular program was adopted by the Colorado College faculty in the fall of 1969, and it was put into effect by the administration and the faculty at the beginning of the 1970 school year. This revised program, known as the Colorado College Plan, had several distinctive provisions, the most basic being the division of the academic year into nine blocks, each three and one-half weeks in length. Under this calendar arrangement, the students take only one course per block and the faculty members teach a single course.

The decision to adopt such a radically different calendar grew out of serious reconsiderations directed to the undergraduate liberal arts experiences on the Colorado College campus. The particular revisions, approved after extensive deliberations among the total faculty, were made to intensify the academic experiences of all students and to maximize the potentialities of the teaching-learning situations and teacher-student relationships.

Evaluation of the Colorado College Plan was an acknowledged concern with the inception of the Plan, and appropriate procedures were initiated in the course of the first year. A long-range evaluation, addressed to numerous aspects of the total program, has been continued throughout the decade.

This collection of chapters represents a preliminary report on selected results drawn from studies involving the faculty and students. The College administration and the research staff agreed on the merits of such a report to the total College constituency and the interested public, if only to reveal that the students believe they have fared well and received a good education and the teachers are convinced that they have successfully accomplished their professorial responsibilities following the conversion to a significantly different curricular format.

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Colorado College has been a well-known, liberal arts institution for many decades, and the general excellence of its program gained additional recognition during the 1960s when the College affiliated with the Associated Colleges of the Midwest. Not long after this event, the administration and faculty demonstrated their continuing concern about quality education in the development and adoption of the Colorado College Plan. This organizational revision of a total curricular program, coming near the end of a decade of a great variety of innovation throughout American higher education, received immediate attention as a major attempt to improve and vitalize an undergraduate, liberal arts institution. To knowledgeable observers it has been seen as one of the boldest and most exciting renovations of an existing teaching-learning environment. The very fact of the scope of the changes effected in a respected program in an established and already successful institution will stand as a landmark in the history of liberal arts colleges.

The chief, identifying characteristic of the Colorado College Plan, often labeled the Block Plan, centered on changing from a two-semester format to one of nine blocks, each consisting of three and one half weeks. The continuous development of this plan, in design and operation, has been followed with avid interest, if only to determine with what success the objectives and special provisions have been carried out. Prominent among the other special features are the following: the involvement of each student and each faculty member in only one course per block; the more adequate accommodation of varied styles of learning among a diverse student body; a reemphasis on the provision of opportunities for all to have meaningful experiences with several major areas of knowledge; the provision for intense, in-depth involvement and concentrated inquiry in the several areas for all students; a built-in flexibility in the program scheduling, permitting, for example, the arrangement of extensive field study experiences and freedom of decision about length of daily class periods and time of meeting; the advantages of relatively small classes; a special emphasis on and utilization of extracurricular activities to accommodate cultural, recreational and leisure interests; and the opportunity for an intense pursuit of both teaching and continued learning by faculty members in their respective areas.

The planning for this extensive change in the Colorado College curricular program encompassed general provisions evaluating the instituted changes and procedural aspects of the program, as well as the various effects of the new program provisions on the diversity of students. Since the major concentration of time and effort was given initially to instituting the substantive program and effecting the necessary changes and adjustments, the incorporation of a planned, comprehensive evaluation was scheduled as a second stage of development. However, an important first phase of evaluation, accomplished via surveys of faculty and student opinions and reactions, was conducted annually.

The bases of a proposed plan of evaluation were derived from (a) the stated objectives underlying the Block Plan, and (b) an acknowledged staff and faculty interest in determining the overall quality, the functional success, and effects of the new program, as well as the participants' satisfaction with it. The stated objectives (a) from the standpoint of student learning, are quite similar to the academic objectives of the previous, fairly traditional, liberal arts program. However, a formal, comprehensive investigation of the success and effects of the former program was never conducted. This fact had certain implications for both the scope and type of an evaluation of the present program and the type of results possible. For example, the study of the Colorado College Plan did not have the advantage of a comparative base drawn from longitudinal studies of former classes.

The current academic objectives, rephrased or paraphrased from available College literature, are briefly stated here to provide some common basis for considering important aspects of the evaluative plan. The several objectives were: (a) to provide students the best possible liberal arts education, encompassing experiences in the humanities, the social sciences, and the natural sciences; (b) to inspire an attitude of inquiry and creativity in all students; (c) to encourage them to think, analyze and arrive at independent judgments; and (d) to provide opportunities for acquiring the foundation for professional specialization, especially through the emphasis given to work in a major field.

Along with the academic objectives, the several provisions and the procedural features of the Plan were viewed as additional objectives, thus also serving as research guidelines in an expanded address to the evaluation of the total program. Objectives of this nature were the following: (a) to provide for more effective learning experiences by concentration of effort and time in one subject area and facilitating a higher degree of control over use of time; (b) to provide for greater and more active participation partly by working more closely in small(er) groups in the setting of goals and determining of course content; (c) to provide for greater effectiveness through integration of the several programmatic aspects, the academic, extracurricular and residential, as well as on- and off-campus activities; and (d) to encourage more efficient and effective use of resources and the multiple educational options for the variety of students, as permitted by the particular, revised calendar and course reorganization.

The program of evaluation of the Colorado College Plan developed through several stages, starting with the initial concern and provisionary statements of the Colorado College Planning Office. The early address to the general need for research and evaluation led to two developments: 1) the aforementioned opinion surveys of faculty and students as to their reception of the instituted Plan, and 2) a search for an outside person or agency to plan, organize and coordinate a longrange study of the effects and success of the Plan in operation.

The first phase of evaluation was completed by 1974. Surveys of the faculty and students were conducted during four consecutive spring seasons, with a very high response rate from both sectors. The results of these surveys, directed to attitudes, opinions and performance, gave testimony to both the success of the Plan and the existence of a number of problems. However, the predominant story was one of success and enthusiasm, with large majorities of both faculty and students presenting very favorable reactions to most aspects of the total program.

The results of these early surveys have been used as the bases for considering obvious or persistent problems and to provide the reasons for some changes and adaptations. It is to the credit of most of the faculty that they have lived through rather difficult

transitional periods, have seriously attempted and developed different styles of instruction, have learned to adapt to and live with a drastically different calendar, and have remained flexible enough to experiment and to continue to make changes. The confirmative evidence as to where the faculty stands after the early years may be taken from the vote of a large majority, in the fall of 1974, who favored continuation of the Colorado College Plan on an indefinite basis.

The second phase of the research program on the Colorado College Plan was made up of a number of phases and projects, all of which were planned and directed from outside the institution. In reality, and by proposed design, the longitudinal studies, running between 1973 and 1979, were administered and coordinated both from the outside and within. The immediate week-to-week and month-to-month research tasks and assignments were coordinated and supervised by an on-campus associate. An advisory panel of eight faculty members assisted the research staff as a policy-making and review group for the long-range study.

The longitudinal studies were focused on the following: 1) the students, their backgrounds, orientations, experiences, learning, changes in behavior, and general development; 2) the faculty, their involvements and function in the instructional program and their roles as institutional citizens; 3) and the function and operation of the Block Plan and the effect on the institution. Brief descriptions of these three research areas follow.

Longitudinal Study Of The Students

The chief focus of the overall evaluation study was the students in two classes which enrolled in 1973 and 1974. The inclusion of the 1974 class in the study permitted a replicative approach to the analyses of essential data and results obtained with the first class.

The major focus of the long-range analyses was on the variety of changes--behavioral and intellectual, cognitive and noncognitive--exhibited by different types of students over the four-year period. The students in both classes were typed or subgrouped on the basis of several criteria: level of ability, intellectual disposition, selected background variables, and major program. This subgroup-

Longitudinal Study Of The Students
(continued)

ing of students into types provided the basis for meaningful differentiations to facilitate the assessment of change and the interpretations of varying degrees of change. In iteration, the assessments made of students at the time of initial enrollment and shortly before graduation provided the bases for determining variations in change and development in the students' knowledge and general orientations, goals, values, attitudes and interests. The variations in change were related to the typing or subgrouping of the students, thus leading to explanation and clarification of the changes.

A further basis for clarifying the obtained changes on Colorado College students was provided by comparable data on change drawn from studies completed on other liberal arts campuses. Such relevant data was made available through research conducted at two Centers on the University of California campus at Berkeley.

The objective assessment of change (described above) through the use of knowledge tests, attitude inventories and questionnaires was supplemented by working with samples of interviewed students. This interviewing served several purposes: (a) small samples were interviewed several times in their last two years on campus about their general way of life under the Block Plan; (b) two larger samples, one drawn from each class, were interviewed by visiting and local faculty in the spring of their senior years. These interviews were conducted by two persons and took the form of a dialogue to determine the scope and depth of students' knowledge in their major fields and in the general sphere of the liberal arts.

Study Of Faculty

Samples of faculty were interviewed and surveyed as an adjunct aspect of the total study. The involvement of faculty was accomplished on a random sample basis, with different samples participating in different aspects of the research program. The approach to the faculty was effected through questionnaires and interviews.

Study Of Faculty
(continued)

The chief reason for "studying" samples of the faculty was to obtain information on an important and significant segment of the total college culture and to assess their contribution to the culture and social environment.

The specific purposes for including the faculty in the study of the Block Plan were as follows: 1) to survey their reception of and degree of commitment to the Block Plan; 2) to determine self-perceived changes in orientations, values and attitudes; 3) to determine changes in orientations toward undergraduate education, the teaching process and the understanding of students; and 4) to study faculty members "biographically," with special attention given to changes in their "pattern" of living, their own learning and their scholastic endeavors.

Subsidiary Research Projects

To round out the body of information considered of importance for a broad view of the Block Plan and its operation, several projects were initiated in the last four years of the study. These will be reviewed very briefly.

The first of such subsidiary projects was a study of the drop-outs from the two classes included in the long-range evaluation. The major concerns were the rate of dropping out, the time of withdrawing, the reason for withdrawing, and the type of students leaving. The pertinent data was collected from available records on campus and through use of survey questionnaires of samples of students who withdrew from both classes.

A second project was planned and designed to provide comparisons of curricular programs completed between two classes of students (1968, 1969) who graduated previous to the inception of the Block Plan and two classes graduating since its inception. Analyses were made of individual transcripts to determine the composite of courses that constitute a major program and a minor program and also the other courses which fall under the definition of a core program and/or a liberal arts degree. The comparison between the classes from the two periods was made on the basis of patterns of course work within each of the three divisions of the College.

Subsidiary Research Projects
(continued)

A third project focused on the use of the library during periods of time preceding and following the inception of the new Plan. Through the availability of records kept by the library administration, analyses were made of the general use of the library and the overall function of the library in the late 1960s and the middle years of the present decade. Comparisons were made of the number of book loans during different periods of the academic year, the use of reserve and reference services and the in-house use of study facilities. Also, in the senior assessments of 1977 and 1978, all graduates were questioned about their use of the library during the previous two years.

I. A HISTORY OF THE EARLY DEVELOPMENT OF THE COLORADO COLLEGE PLAN

The Planning Years

In April of 1968, Professor Fred A. Sondermann addressed a memorandum to Colorado College's Committee on Committees, of which he was an elected member from the Division of the Social Sciences. This memorandum, entitled A Proposal for the Establishment of a Committee for 1974, challenged the faculty and administration to undertake a thorough examination of the College's mission as a liberal arts institution in anticipation of its centennial year. This document represented the collective thinking of many individuals who were united in their opposition to a "self-congratulatory" approach to the centennial celebration which would simply call attention to past accomplishments. Instead they favored a centennial observation which would see Colorado College well underway with a renewed and revitalized liberal arts program as the institution began its second one hundred years. The thinking behind the proposal for a "Committee of 1974" was summarized as follows:

> The purpose is not to devise a "Master Plan 1974." Rather, the purpose is to have a group of people, representing all parts of the College community, address themselves to the task of figuring out what kind of a College we wish to be, what kind of a College it will be possible for us to be, and how these two projections can be brought into meaningful and productive relationship.[1]

It seems evident that the articulation of this purpose was a culmination of Colorado College's continuing concern during the sixties about the quality of its liberal arts program. Certainly national trends in education during the sixties were in the direction of change and innovation, and there is no question that faculty and administrative leadership, in a combined effort to reconfirm the strong liberal arts tradition of the College,

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[1]Fred A. Sondermann, A Proposal for the Establishment of a Committee for 1974, Colorado College Document, 1968, p. 1. Ironically the phrase, "Master Plan," later was almost universally used to designate the Planning Office's proposed block calendar in 1969. See Appendix A.

established an operational style and atmosphere which underscored a firm commitment to experimentation and innovation as the most effective means of maintaining a quality program. In fact, the dedication of the College to the liberal arts and sciences and the faculty's open-mindedness to change were observations keenly underscored in the decidedly positive, ten-year reaccreditation report presented by the North Central Association of Colleges and Secondary Schools which sent a visiting team to the campus in April 1968, the same month in which Professor Sondermann penned his proposal. The accrediting team's report highlighted several examples of the growing willingness of the College to innovate and experiment in its search for a liberal arts ideal during the period under review, while at the same time it recommended a stronger commitment to long-range planning as an important institutional goal.

As early as 1960, the Academic Program Committee had sent to the faculty several resolutions calling for significant academic policy changes including a reduction of the semester hours required for graduation from 128 to 120, the development of four-hour courses as a means of cutting back the number of departmental offerings, and the institution of a program of twelve credit hours of independent study for majors. Although the idea of reducing the hours required for graduation was tabled and a specific independent study program for majors not adopted, the Academic Program Committee could report by March 1963, that in principle the 1960 resolutions regarding four-hour courses and the extension of independent study courses had been implemented.

The faculty's commitment to liberal arts education also was evident in the adoption of several innovative and experimental academic programs during the sixties. In 1964, a Selected Student Program for freshmen was approved. The 1965-66 academic year saw the revival of the Classics Department, and the College gave even stronger expression to the growing interest in independent study by joining Allegheny and Lake Forest as participants in a pilot project in independent studies funded by the Ford Foundation. By 1967, the possibility of providing even greater diversity and flexibility in the College's program led to the approval of the Adviser Plan, described as a pilot program for possible changes later. Under the Adviser Plan to be implemented in the fall of

1967, fifty freshmen, randomly selected each year from those interested in the program, were allowed to spend four years without necessarily meeting all standard course requirements except the total hours required for graduation.

However, not all recommendations for change met with approval. In March 1967, by nearly a three-to-one vote the faculty rejected a proposal for a four-course plan in which most courses would carry the same amount of credit and students would enroll in four courses each semester, although the proposal had the solid backing of the administration and the Academic Program Committee. The faculty went on to make other changes more to its liking during the spring of 1968, including at long last a reduction of the semester hours required for graduation from 128 to 120, a reduction of students' maximum number of hours permitted in a semester, and a modification of distributional requirements, all of which were designed to give students greater responsibility for their own education. The 1968-69 academic year would see the adoption of a freshman seminar program, intensive debate over student-taught courses and the grading system, the beginnings of discussions to increase student representation on virtually all standing committees of the College, the implementation of a new tricameral form of campus government (The Colorado College Campus Association), and finally the announcement that Colorado College would become affiliated with the Associated Colleges of the Midwest, effective in the fall of 1969.

At the same time innovations and experimental programs were being considered, the faculty also reviewed the curriculum for the purpose of cutting back or eliminating those academic programs not believed germane to a liberal arts education. Not surprisingly, in March and April of 1966, a sweeping revision of the Teacher Education Program which dramatically reduced the number and types of education courses and a phasing out of the Master of Arts graduate program gained faculty support. A year later, a decision was reached to remove credit for courses in secretarial studies and radio broadcasting, thereby signalling the imminent demise of these programs.

In summary, the context for understanding the importance of the historic Sondermann memorandum was a preceding decade of

impressive innovation and experimentation at Colorado College, designed to consolidate resources in support of the liberal arts and sciences as the College's sole educational objective.

On May 13, 1968, Professor William Hochman, chairman of the Committee on Committees, presented to the faculty the Sondermann proposal for a Committee to consider and speculate on desirable aspects for the College in 1974. In the discussion which followed, the faculty rejected the idea of a committee in favor of having the Dean of the College work with department chairmen to implement the basic purpose of the proposal. After further discussion over the summer, the new chairman of the Committee on Committees, Professor Bernard Arnest, announced at a meeting of the faculty in September the appointment of Professor Glenn Brooks of the Political Science Department to the post of Special Faculty Assistant to the President, newly created to provide leadership for the thorough institutional self-study proposed by the Sondermann memorandum.

From the beginning of his appointment in the fall of 1968, Professor Brooks advocated a "planning project" approach to his assignment rather than an approach utilizing a special ad hoc committee. The fundamental purpose of the Planning Office which Brooks organized was "to work out a Master Plan for Colorado College during the next two years which will give us a running start into the centennial decade of the 1970's and beyond."[2] Brooks' Planning Office based its operation on the assumption that any viable long-range operational goals, that is, goals which could be translated into policies and programs, had to be evolved out of candid discussions among faculty, students, administration, and trustees. In other words, a statement of objectives became the first order of business for the newly organized Planning Office, and to this end, under the joint sponsorship of the Planning Office and the Academic Program Committee, a complete department by department review of the

[2]Glenn Brooks, "A Memorandum to President Lloyd E. Worner," Colorado College Document, September 20, 1968, p. 1.

academic program was begun in the early fall of 1968. Students, led by volunteer workers in the Planning Office, held counterpart meetings. As a result of the reviews, which involved quite literally hundreds of faculty and students, all kinds of campus-wide conversations opened up and generated ideas, suggestions, and proposals about the College's educational program. Brooks provided the important role of synthesizing the vast array of ideas and suggestions generated by this open-door review.

The Planning Office's review clarified and underscored the fundamental commitment to the College's liberal arts purpose which virtually all of the campus' constituencies agreed should be the main goal of the College: to provide liberating knowledge, to enhance disciplined thought, to develop students' capacity for serious commitment, to provide creative leisure, and to develop a community of learning. Also, the review confirmed that the institution possessed healthy basic resources necessary for a successful carrying out of these agreed-on objectives--a highly competent faculty, an interesting and capable student body, an exceptional physical plant, and an able administration.

But, the major thrust of the Planning Office study during the fall of 1968 came to be a critical statement about what Brooks referred to as the "gap between the official rhetoric surrounding the liberal arts education of the College and what actually was going on."[3] Thus, the Planning Office could report that, although officially the four or five-course semester plan might talk of balance and integration of the academic program with leisure and extracurricular activities, in reality students talked of living and laboring in an atmosphere of almost continued harassment and crisis, stealing time from one course to meet the demands of another, until for many education had become a game of time manipulation instead of serious, contemplative learning. Also, the official image of a faculty effectively balancing the demands of its long-range professional commitments with the immediate demands of a teaching career did not correspond with the faculty's

[3]Brooks, "Address to the Faculty Fall Conference," Colorado College Document, August 30, 1969.

expressed sense of harassment and of not being able to teach as effectively as expected because of conflicting pressures on use of time. In a similar fashion, the Planning Office's review unveiled discrepancies between official rhetoric regarding extracurricular activities and residence halls. In short, the residence halls were not seen as integral parts of an academic community as one would hope on a predominantly residential campus, and opinion was unified that both students and faculty were not taking advantage of cultural and cocurricular programs, and campus organizations were at a point of morbidity. The unifying thread which seemed to tie together the several problem areas which emerged in these early campus-wide reviews was faculty and student concern over class size and control of time for various educational purposes. Many spoke of their overall dissatisfaction with the semester system in terms of what was described as a fragmentation of time, exacerbated by average class sizes which belied the officially published student-faculty ratio of fourteen to one.

By October of 1968, Brooks and the Planning Office had turned discussion in the direction of possible solutions to this dissatisfaction. In response to Brooks' probing, several members of the faculty made suggestions and began formulating ideas which attempted to address the general class size and time-fragmentation problems underscored by the campus departmental reviews. Even before the Planning Office's fall project had gotten underway, Professor Werner Heim, serving on the Academic Program Committee from the Biology Department, had reflected the faculty's persistent concern over the vitality of its commitment to liberal education by suggesting the possible addition of a "leading questions" general education program designed to offer students opportunities during all four of their years at the College to integrate knowledge through an exploration in breadth and depth of leading and relevant questions confronting mankind.[4] Consideration of Heim's specific proposal for curriculum integration was put aside by the issues being stimulated by the Planning Office, but his concern for a way to promote a sense of

[4]Werner Heim, "A Memorandum to the Academic Program Committee," Colorado College Document, October 3, 1968.

intellectual community among students and faculty and his emphasis on increasing students' liability for their own learning was shared by many faculty and students who came forward with ideas in response to the initial results of the Brooks planning project.

One of the many students inspired by the planning project proposed in writing that energies be directed toward some means of insuring a small group approach to teaching as a way to insure wider student involvement in a course. This student's concept essentially called for the formation of required discussion groups to augment the lecture system of the College. It was an idea that would be basic in later discussions of revisions of the calendar.

Professor James Trissel of the Art Department, also a member of the Academic Program Committee, called for the adoption of an "X course option" which was designed to stimulate faculty curriculum planning initiative and boost the general morale of faculty members who found themselves increasingly weighted down with overwhelming commitments to departmental majors. Trissel's "undesignated course" in a faculty member's yearly offerings could, he argued, generate interdisciplinary offerings and freshman seminars, stimulate independent study, promote more small enrollment seminars, increase general education curriculum, and provide "the real possibility for variety and change in the nature of our teaching. . ."[5]

Early in October 1968, several faculty members began discussing with Brooks possible ways of altering the calendar as a means of improving teaching and learning environment. One individual suggested rearranging available time allotted for multiple courses in the semester in such a way that consecutive hours for a particular subject might result in greater in-depth involvement, and Professor Douglas Freed of the Psychology Department began speculating about ways to achieve a more realistic student-faculty ratio as far as average class size was concerned. Freed pointed

[5]James Trissel, "A Memorandum to the Academic Program Committee," Colorado College Document, October 1968.

out the effect on average class size caused by the discrepancy between the number of hours taken by students and the number of hours taught by faculty. Freed's proposed solutions to the College's pattern of lecture courses featuring thirty-five to forty-five students included ideas about reducing student course loads, teaching a few large course options as a trade-off for smaller classes, nonteaching some courses in terms of greater reliance on programmed learning, and increasing faculty course loads while reducing class meetings. Freed also wrote to Brooks about the importance of incorporating lectures, concerts, plays, movies and so forth as integral parts of a student's overall educational program.[6] But Professor Don Shearn of the Psychology Department, also chairman of the Academic Program Committee, in 1968 perhaps was the first to suggest the possibility of a radical revision of the existing calendar as a means of revitalizing the College's academic program. In his discussions with the Academic Program Committee and Glenn Brooks, Shearn suggested that the best possible teaching format would provide him fifteen students, that is, approximately the published College student-faculty ratio, and a block of time to accomplish the goals of a particular course. The "Shearn plan," as it was labeled by those who reacted to his ideas, called for dividing the semesters into three four-week periods or blocks during which time students would take one course and faculty would teach one course. The strongest objection to Shearn's radically new way of approaching the curriculum was the drastic reduction in the number of courses students would take from approximately thirty-five under the multiple course system to only twenty-four under Shearn's revised calendar proposal. Nevertheless, a fundamental idea had been suggested in the early phase of the Brooks planning review. In the weeks which followed, the basic idea of the "Shearn plan" gained momentum and stimulated expanded discussion among students and faculty.

[6]Douglas Freed, "A Memorandum to Glenn Brooks," Colorado College Document, November 12, 1968.

A mathematician, Professor Wilson Gateley, became intrigued by the possibilities of Shearn's idea and presented to the Academic Program Committee detailed plans for an academic schedule based on a one-course-at-a-time approach. Gateley designed a calendar which featured a division of the academic year into nine four-week blocks (four before Christmas and five after). Each block would be divided into a three-week work session followed by a one-week leisure session. Gateley envisioned students taking eight courses a year and faculty teaching six. His so-called "1-8 plan," so named because of suggested student scheduling of eight courses, also provided options for full or half-courses offered in the time periods available.

Gateley noted that the major advantages of this calendar would be to give an instructor full control over a student's time and to enhance field trips as well as other flexible teaching modes. At the same time, his apparent doubt about whether effective teaching and learning could occur in such relatively short sessions led him to revise his proposed calendar only a week later. His second plan suggested the division of the academic year into four seven-week periods separated by one week of leisure in the fall, three weeks at Christmas, and two or three weeks in the spring. This second version suggested that students and faculty would be committed to two half-courses during each of the seven-week blocks. In a span of one week Gateley had worked out two calendar models which spurred the Academic Program Committee's interest in the ramifications of a dramatic calendar change, as one viable way of revitalizing the College's liberal arts program.

Professor Brooks was also intrigued by the one-course-at-a-time concept and its possibilities. With the endorsement of the Academic Program Committee and the Committee on Committees, as well as the Offices of the President and Dean, Brooks set upon the task of formulating a so-called "Master Plan," which he would later emphasize would be presented not as a panacea for the College's problems but as one possible way of upping the percentages in favor of improving the overall quality of those key experiences which all constituencies agreed were at the center of the College's liberal arts purpose. Brooks seized upon the concept of unified learning to give direction to the development of the

plan. By unified learning he meant the restoration of the classical triangle between teacher, subject matter, and a small group of students working in one place without major distractions for a period of time sufficient for genuine learning to take place. Brooks' concept began with the fundamental assumption that a plan utilizing a unified learning approach could be developed without requiring radical changes in the College's concept of courses, the semester as an administrative unit, the structure of majors, general degree requirements or departmental organization of the faculty. This assumption no doubt was of key importance in broadening faculty and student interest in alternatives to the multiple course system as the politics of change began to unfold during the 1968-1969 academic year.

By January 29, 1969, Brooks was prepared to present to the faculty an outline for the "Master Plan." In part, he wrote to the faculty:

> An idea for a new approach in the organization of our courses has evolved from the review of the academic program, and from numerous memos, meetings, and conversations with faculty. The plan would allow us to abandon the fragmented system in which professors teach and students take several courses at once. Instead, we would have a flexible single-course plan in which one professor or group of professors would work with a small group of students on one subject for a period of time sufficiently long for real learning to take place. Students and faculty would be responsible for only one formal course at a time, but would have increased opportunities to pursue special interests outside of their course.

The proposal which began to emerge in January of 1969 called for significant changes and developments in all areas of the College, but chiefly in the three major concentrations of academic

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[7]Brooks, "A Letter to Faculty," Colorado College Document, January 29, 1969, p. 1.

program, residential life, and cocurricular/extracurricular affairs. At the same time, of course, reform in the area of the College's central purpose, that is, the academic program, became the focal point of growing discussion among faculty and students with Glenn Brooks continuing to serve as the chief synthesizer of a vast array of suggestions and ideas for developing the outlined "Master Plan." Brooks' earliest formulation suggested a new calendar featuring "blocks of time" of variable lengths, that is, time periods of two, four, six and eight weeks. He envisioned a curriculum of multilengthed courses offered simultaneously according to the time required to teach subject matters of various degrees of complexity. The early Brooks calendar also specifically addressed one of the key issues which had emerged in faculty discussions of various intensive course calendar options, namely the concern by many that some courses needed reflection time or "soaking-in" time to be effectively taught. Hence, his early block idea provided opportunities for extending certain courses over a significant period of time. For example, it was suggested that for certain complex courses an introductory section of two or even four weeks could be followed later on, after reflection time, by an additional block of intensive study.

Other exemplary features of the early block concept were limitations on maximum class size to insure uniformly small classes, an encouragement of interdisciplinary courses, flexible daily and weekly scheduling with an elimination entirely of bells, the emergence of the "courseroom" concept as a replacement of "classrooms," and a very strong emphasis on the importance of faculty members giving themselves the time needed for long-range professional development and preparation.

With the backing of the President's Office, the Planning Office proceeded with a detailed study of the feasibility of implementing a radically new block calendar at Colorado College. Brooks' basic assumption at this point was that, although there appeared to be remarkably keen interest in the outlined "Master Plan," all details and all potential as well as real problems had to be confronted, before formal approval from responsible policy-making bodies could be sought. Thus, the Planning Office continued its policy of frequent and extensive consultations with interested parties at all stages of the developments that spring. A key decision was made

to develop a trial registration featuring single courses, interdisciplinary courses, and groups of dissimilar courses of varying lengths. The faculty produced a mockup of a course plan, using three-, six-, and nine-week blocks of time. Individual departmental mock schedules were cast into a master schedule and approximately seven percent of the student body was asked to draw up a full-year schedule. Virtually all of the students were able to pick out a satisfactory schedule. This mock registration indicated that through coordination of departments conflicts in scheduling could be eliminated; hence the limits and advantages of the emerging Plan were defined.

As was to be suspected, several faculty reacted by submitting to the Planning Office alternative suggestions for calendar modification. One member suggested instead that a quarter system be adopted, and Professor Ruth Barton of the English Department outlined a system providing two twelve-week semesters during which students would take and faculty would teach three courses and featuring also a "January term" of four weeks and a "fall term" of two weeks. These various counter proposals were important in that they reflected the major controversies which the alternative of an intensive-course calendar raised among the faculty. For example, the appeal of a system which would allow different types of courses to be taught in different ways over varying lengths of time had to be balanced by the continuing appeal of the opportunities for integrating disciplines allegedly promised by multicourse calendars. The appeal of intensive learning had to be seen against the backdrop of maturation and reflection needed, many insisted, for certain types of courses.

As solid information came into the Planning Office during the spring of 1969, it was shared with appropriate committees and modified by the Planning Office. Late in the 1969 academic year, Brooks was prepared to present to the faculty a coherent proposal for a new College plan. In May 1969, the findings and recommended new proposal of the Planning Office was sent to all students at Colorado College in the form of a long memorandum from Brooks. Using a format featuring a series of questions and answers, Brooks informed the student body about the purpose of the Plan and its impact on the academic program of the College. Then, in a series of three summer reports from the Planning

Office to the faculty, Brooks outlined a long-range plan for Colorado College. The first of these reports simply pointed out the technical feasibility of implementing an intensive-course, block calendar and stressed the advantages to be gained of small classes and the elimination of time conflicts between courses.[8]

The second report was a detailed proposal for a specific new academic program based on the year-long faculty and student reviews. This proposal for the first time was labeled by Brooks as The Colorado College Plan. The Plan, as presented in August 1969, called for a modular course structure with units or "blocks" of three, six and nine weeks set in a thirty-three week academic calendar. As Brooks explained in his report:

> The faculty member working under the new course plan would have a choice of several layouts for his courses. Depending upon the nature of the subject, a faculty member could choose time periods of three weeks, six weeks, or nine weeks for his courses. Nearly all faculty members that I talked to felt that three weeks was adequate for a topical course or an introduction to a subject and would also be satisfactory for certain kinds of departmental seminars. Six weeks seems adequate for covering a basic body of knowledge in most conventional courses. Nine weeks might be needed for courses involving a particularly large and complex body of knowledge that is presently badly compressed in the present semester system. Most faculty felt that two weeks was simply not long enough for a course while four weeks was too long for topical subjects. Therefore they tended to favor the 3-6-9 plan over a 2-4-8 or a 5 1/2-11 plan.[9]

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[8]Glenn Brooks, "A Memorandum to All Faculty," Colorado College Document, July 21, 1969.

[9]Glenn Brocks, "A Memorandum to the Faculty," Colorado College Document, August 4, 1969, p. 1.

The proposal also included a long weekend every three weeks in which work would finish up on a Thursday and not commence again until the following Monday. The "block break" concept, therefore, was born.

Within these variable time periods, Brooks proposed that several types of courses be offered. First, it was assumed that many faculty would opt to offer single, principle courses in which one professor and a small group of students would work together for the designated period of weeks on a given subject. Second, Brooks strongly emphasized the hope that two to three faculty would join together to offer interdisciplinary or intradisciplinary courses during one of the designated time periods. A third course format was suggested in response to a considerable number of faculty who thought certain kinds of subject matter had to be offered over an extended period of time to allow for absorption or, because of the demanding nature of the subject which needed extended time. Thus, it was proposed that the last nine weeks of the fall semester be designated as an "extended half-course" period during which time some faculty and some students might elect to be committed to two half-courses, one of which would meet in the early morning and one in the late morning.

The Colorado College Plan also proposed the creation of semester- or year-long adjunct courses which were to be carefully distinguished from the principle courses in the curriculum. Adjunct courses were seen as an important bridge between the intensive academic program and the leisure program of the College, and they were to include such areas as dance, physical education, language skill maintenance, choir, applied music and so forth.

Under the August proposal, it was suggested that faculty be expected to teach thirty out of the thirty-three blocks of time in the proposed calendar. However, Brooks noted that up to six weeks of blocks in a faculty member's schedule should normally be designated as independent study, independent research or tutorial courses, during which time, it was suggested, a faculty member would not be teaching in a conventional sense.

In a similar fashion, the Plan called for students to enroll for thirty weeks of work as normal progress toward the degree with the degree requirement being one hundred twenty weeks of passing work. The Plan also maintained normal departmental and all-College requirements including the requirement of a major.

In a third Planning Office report, Brooks outlined long-range plans for the nonacademic aspects of the College Plan, including the physical environment, residence halls, extracurricular programs, and administrative offices.[10]

It was pointed out that the proposed change in course formats would entail a fundamental change in the concept of a classroom. To the greatest extent possible, the new plan sought to guarantee each course a space that it could use exclusively for the entire length of the block of time. By giving professors and their students extensive control over their courseroom, the architect of the Plan hoped to foster the creation of more responsive environments for learning. Brooks indicated that, should the proposed experiment prove successful, further changes in the campus design would need to be considered in the future.

Brooks also envisioned changes in the role and use of residence halls. The proposed Plan viewed the housing of students as a central element in their education; therefore the proposed plan encouraged new styles of residential living with emphasis on experimental coed housing and, most importantly, more academic and cocurricular activities in residence halls.

The new Plan's emphasis on improving the general quality of the campus' educational environment led to a call for substantial alternatives in the extracurricular program of the College. Thus, Brooks emphasized the importance of an integrated "leisure program" to provide a contrast and balance to the intensive-course academic program. The proposed leisure program would

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[10]Glenn Brooks, "A Memorandum to the Faculty," Colorado College Document, August 25, 1969.

include many of the ordinary activities and events of the undergraduate campus, such as athletics, clubs, lectures, performance, and cultural affairs, but also assumed there was need for additional outlets for students' creative energies, in the area of experimental student projects such as film-making and music, arts and crafts, and student-initiated seminars and noncredit courses.

The Adoption Of The Colorado College Plan

The release of the three Planning Office reports in the summer of 1969 set the stage for a decision concerning the feasibility of implementing a new educational program at Colorado College. The Academic Program Committee, the faculty's Committee on Committees, and the Offices of the President and the Dean of the College all pledged support of a timetable calling for a faculty vote on the proposed new Plan in the early fall of 1969 with the understanding that, if approved by the faculty, the new program would be implemented beginning in the fall semester, 1970. Opinion was unified in the Academic Program Committee and the Committee on Committees that at least a full year of lead-time would be required to prepare the College for the change to a new calendar; therefore preparations were begun to insure a vote by October 1969. To this end, the Committee on Committees decided that consideration of the Brooks proposal would be the topic for discussion at its annual Faculty Fall Conference, the traditional beginning point of the College's academic year.

At the conference on August 30, 1969, Professor Brooks systematically reviewed the findings of the Planning Office's year-long study and presented the details of the proposed Colorado College Plan. The major portion of time at the conference, however, was devoted to lively and prolonged faculty discussion and debate over the strengths and weaknesses of the Plan. Most all of the key issues which divided faculty and student opinions were brought to the conference floor for a thorough airing in a committee-of-the-whole atmosphere. Also, for the first time perhaps, the lines of support and opposition within the faculty were visible to all present.

Both supporters and opponents raised a number of questions about the academic ramifications of the new calendar. Can the faculty

stand the expected intensity of the new calendar? Will it not be true that the lecture system will be destroyed? Will there be sufficient "soaking-in" time for complex subject matter? Will teaching of courses become so streamlined that fun things will be abandoned, resulting in a "barebones," dull pedagogical system? Will many students become over-specialized because of the heavy pressures of some majors in terms of the number of courses required? What happens when illness occurs for students and faculty? Is there an elitist taint which is unfair to average students, or will indifferent and disinterested students be turned on by the new program? Will integration of courses be hampered by the block effect? Does research in education support such a radically different approach to liberal education? These and other questions and responses from proponents and opponents of the Plan dominated the afternoon discussion.

The Fall Conference concluded with both President Lloyd E. Worner and Dean of the College, George A. Drake, recommending that the faculty commit itself to a timetable calling for an initial decision about the Brooks' proposal no later than mid-October of the fall semester, 1969. The Dean explained that an early fall decision would be required to insure enough preparation time for changing the College over. The faculty agreed to this plan with the understanding that the Brooks' recommendation for a new College plan should now be turned over to the Academic Program Committee for further reactions. Finally plans were made for special faculty meetings for September and early October to insure additional opportunities for faculty discussion of the new calendar.

The Academic Program Committee, as expected, received numerous responses from faculty and students as it began its task of preparing a final recommendation for the faculty vote. Strong voices within the faculty calling for modification and compromise of the Brooks' one-course-at-a-time calendar were raised. Distinguished Professor of Philosophy, J. Glenn Gray, perhaps summarized most effectively the concerns of those faculty who, though convinced some change was necessary, leaned nevertheless toward compromise and modification. In an earlier memorandum to Glenn Brooks, Professor Gray had written:

> Though learning theory is, as always, in a parlous state, there is some agreement that what is learned quickly is also quickly forgotten. Remembering is aided by seeing connections among various disciplines, glimpsing wholes, making syntheses. In its linear concentration on one subject after another, the Master Plan seems to neglect this gestalt principle of learning, which is, of course, as old as the ancient Greeks. You replace it with the more recent behavioristic theory. Prior to some experimenting, I would fear the very effects of fragmentation in learning which the Master Plan seeks to avoid.[11]

Following the Faculty Fall Conference Professor Brooks presented the Block Plan proposal to the campus in a formal address at the annual Opening Convocation in September 1969. Debate and discussion among students and faculty continued, and some opponents of the Brooks' proposal voiced the opinion that the Opening Convocation address had given unfair advantages to the proponents of the Plan. The concern raised by the advocates of compromise or moderate change was quelled somewhat by the response of the Dean of the College who convened two special meetings of faculty members working on alternative proposals. The results of these meetings were sent to the faculty as a whole and to the Academic Program Committee for inclusion in its deliberations.

As momentum seemed to gain in certain circles for a compromise proposal, student advocates of the fundamental Brooks' idea raised a cry of alarm. Representative was a letter which appeared in the October 16, 1969 edition of The Catalyst. Mr. Steve Trimble in part wrote:

> I am an advocate of the original Plan. And I support any alternative program that preserves the basic

[11] J. Glenn Gray, "A Memorandum to Glenn Brooks," Colorado College Document, February 10, 1969, p. 1.

philosophy behind Dr. Brooks' ideas . . . The arguments for the plan have been presented before by many people, so I will not repeat them. But I'm afraid of the faculty passing a worthless, and perhaps harmful compromise because of arguments over unresolved details. Simply because there are problems involved in the administration of the Plan is not a valid reason for abandoning the Plan. Approve the basic idea. THEN resolve all the problems. For the intensive study approach to education seems too beautiful to be defeated by minor problems that can be overcome.

At a special meeting on October 13, 1969, the faculty agreed on the ground rules which would govern its vote on October 27, 1969. These adopted procedures provided for a final discussion of the Colorado College Plan for a period not to exceed forty-five minutes, after which an opportunity for amending the proposal would be entertained prior to a vote on the Plan by secret ballot. The faculty agreed that, should the proposed Colorado College Plan be defeated, alternative proposals could then be sent to the Academic Program Committee and the Planning Office for future consideration. After agreement was reached on procedural guidelines, the faculty then considered the Academic Program Committee's report which presented three alternative proposals for discussion. (See appendix B.) These proposals were the original Brooks' Plan as presented in the three summer reports from the Planning Office, the Academic Program Committee's modified version of the Brooks' Plan, and a distinctive compromise proposal which had been developed by Professors Jane Cauvel and Glenn Gray of the Philosophy Department, Douglas Fox of the Religion Department, Frank Krutzke of the English Department, and Douglas Mertz of the Political Science Department.

During September 1969, the Academic Program Committee, chaired by Professor Charles Bordner of the Physics Department, had received numerous suggestions for modifying the Brooks' Plan, including three major suggestions of alternative plans. One alternative proposal recommended substitution of a three-course quarter system. Another, presented by Professor Paul Kutsche of the Anthropology Department suggested a dual system under

which students would take and faculty teach three courses in the fall semester followed by a modular, one-course-at-a-time plan during the spring semester. A third alternative, the Cauvel-Gray-Fox-Krutzke-Mertz plan, was deemed to have the most merit by the Academic Program Committee; hence a decision was made to present it to the faculty at the special meeting on October 13, 1969. This compromise divided the academic year into two twelve-week, three-course semesters divided by a six-week winter term during which students would take one course or one program. The intent of the compromise was to strengthen the values inherent in the College's traditional semester system while at the same time providing diversity in teaching and learning during the extended winter term.

The Committee also saw fit to present its own modified version of the Planning Office proposal. While maintaining essentially the Planning Office idea, the Academic Program Committee's modified proposal retained the thirty-three week calendar of the Brooks' Plan, but changed the number and length of the blocks. This calendar featured a nine-block academic year with blocks one and nine being three weeks long and the other seven blocks being three and one-half weeks long. In response to a suggestion by Professor Van Shaw of the Sociology Department, the Committee took Brooks' proposed three weeks of free time and distributed it between blocks providing thereby "block breaks" which would commence Wednesdays at noon and last until Monday morning. And in an attempt to mollify those faculty who continued to express concern about the need for extended time for certain kinds of courses, the Committee's calendar provided extended half-course periods of ten and one-half weeks each semester. The departments of English, History, Music, Philosophy, Religion, Anthropology, Economics/Business Administration, and certain individuals from the natural sciences led this debate.

All three plans presented for discussion on October 13, 1969 preserved Brooks' unified learning concept by retaining the concepts of leisure and residential programming, and semester-long adjunct courses.

The work was done. Faculty and student opinions were formed. The College was prepared for the vote planned for October 27,

1969. Perhaps former Dean of the College, George A. Drake, summed up the attitudes and feelings of those in the faculty and administration when a month earlier he had written to faculty colleagues who were urging compromise as the best approach:

> I hope that no one feels that there is an attempt to "railroad" the proposal through the faculty, and I hope that we can preserve balance between an insistence that we resolve important and soluble questions and a feeling that all uncertainties must be answered before voting. If we are to embark on this plan we would like to begin in the fall of 1970. However, an even greater priority is that the faculty should feel that it has adequate knowledge of the Plan before deciding whether to adopt it.[12]

Drake's comment underscored that which had been the administration's position throughout the planning period, namely an insistence that sufficient faculty support of any new program was the first priority to be maintained. In short, the Colorado College Plan would have to be first and foremost a faculty plan if it was to be a success. In fact, although eligible to vote according to the College Bylaws, a total of five administrators agreed that they would not exercise their voting privilege at the upcoming meeting.

In the days leading up to the vote President Lloyd E. Worner, Dean Drake and other key administrators made explicit their willingness to support the Brooks' proposal while insisting on the right of the faculty to decide the issue. In other words, the President and Dean made clear their intention to work for the implementation of any decision the faculty reached. But in spite of the administration's concessions and assurances, mounting campus tension was manifested as the vote neared. Students who purportedly were subjecting known faculty opponents of the Plan to organized pressure suddenly were tagged "Brooks' Raiders."

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[12]George A. Drake, "A Memorandum to Professors Cauvel, Fox, Gray, Krutzke, Mertz," Colorado College Document, September 22, 1969.

Rumors and misconceptions circulated, emphasizing excessive class time necessary under the Plan and the necessity of heavy writing assignments outside of class. Some faculty felt that the Dean and President should not have disclosed their support of the Plan. On balance, however, most faculty were of the opinion that an open hearing had been given to all sides and that, win or lose, the fight had been fair.

At the meeting on October 27, 1969, Dean Drake made the formal motion for the adoption of the Colorado College Plan as modified and revised by the Academic Program Committee. Following a period of intense discussion, two amendments to the proposal were offered. An amendment expanding the number of adjunct courses from one to two each semester, offered by Professor Jenkins of the Music Department, passed. A second amendment, proposed by Professor Reinitz of the English Department, called for a faculty teaching load of eight instead of nine blocks. The Academic Program Committee and the faculty as a whole had agreed to a nine-block teaching load in exchange for maximum class size limits of twenty-five per faculty member in a single course on the grounds that uniformly smaller classes were a good trade-off for teaching more courses. Reinitz argued that the intensity of the block calendar would require faculty time off for scholarly development. The amendment was changed to a recommendation on the floor of the meeting and passed over the objection of the Dean and President who stated no guarantees could be offered that the recommendation could be accommodated. A third amendment asking for the creation of seven-week half courses to go with the ten and one-half week extended half courses incorporated in the proposal was defeated.

At 6:11 p.m., the President called for a vote by secret ballot. The Colorado College Plan passed by a vote of seventy-two in favor to fifty-three opposed. The affirmative vote constituted approximately fifty-eight percent of the one hundred and twenty-five ballots cast. Since there had been no prior agreement about the size of a majority sufficient to proceed with implementation, President Worner called for discussion of the implications of the vote. The opposition leaders stated the danger inherent in establishing a precedent wherein a fifty-eight percent majority

was not considered conclusive. A motion was made to implement the Plan, and it was passed by an overwhelming voice vote.

The Early Years, 1970–74

After the faculty vote and the decision to implement the Academic Program Committee's modified version of the original Brooks' proposal, preparations were made for beginning the new calendar in the fall of 1970. Although approval of the Colorado College Plan included adoption of new all-College and distributional requirements expressed now in terms of a unit system, the faculty was still faced with the formidable task of converting an entire liberal arts curriculum to a new course calendar in time for spring preregistration of students. For administrative purposes only the fall and spring semester nomenclature was retained. Faculty meeting agendas for the six months leading up to preregistration in late April were enormously large as departments, executive committees and the Committee on Instruction worked overtime to prepare the course schedule for students. Moreover, because no one could be sure of how courses should be arranged and ordered in the new calendar, a decision was made to conduct a trial preregistration to precede the final preregistration in April. When a rumor began circulating that the "trial" could become final if all went well, a remarkably high percentage of the student body participated in the "dry run" registration. To the surprise of many, final preregistration in April 1969 seemed to indicate that the faculty in cooperation with the Registrar's Office had done its work well; students by and large were well accommodated in terms of choices and sequences of courses.

The Planning Office continued to lead during this period of transition by coordinating preregistration, developing and identifying over one hundred necessary "courseroom" spaces on campus, calculating library and bookstore needs, helping the Admission Office develop new literature and information handouts, and reviewing the areas of new responsibilities for all administrative offices at the College.

Soon after the adoption of the Plan, Brooks, in a memorandum to President Worner and others, made specific recommendations for evaluation of the new program to be coordinated by the Dean of

the College's Office.[13] A commitment was made to carry out an in-house, internal evaluation of the Plan for the first two or three years followed by an outside professional evaluation. The emphasis of the internal evaluation program, it was agreed, should be a careful observation of the Plan's operation, detection of problems that arise, and swift action to remedy those problems when possible. The initial importance of in-house evaluation efforts was seen as providing the faculty a basis for continuing review and modification of the Plan. The decision to implement it carried with it the understanding that the new Plan would be at least a two-year experiment after which the faculty would decide to abandon, modify or go on.

Mr. Malcolm Ware, one of the key student volunteer workers used by Brooks in the Planning Office project, was hired following his graduation in June 1969, to assist the Dean's Office with the internal evaluation program. His task included working with the deans in the development of various evaluation programs, such as student and faculty questionnaire surveys, and he joined Brooks in a project designed to develop several experimental courserooms on campus. The experimental courseroom project redesigned several conventional lecture rooms in the academic buildings in an attempt to demonstrate the possibilities of more informal, seminar-type settings in keeping with the discussion-group format expected under the Plan. Ware purchased secondhand furniture and used his imagination liberally in developing these experimental areas. The basic concept was utilized in the later extensive remodeling of Palmer Hall and Armstrong Hall. Ware's two-year appointment was followed by the hiring of Mr. James Levison, a 1973 graduate of the College, who continued to develop the internal evaluation program.

Students, faculty, and administrators who began the fall semester at Colorado College in the 1970-71 academic year did so with a sense of eager anticipation as the new Block Plan was inaugurated. No one knew quite what to expect, and reactions were

[13]Glenn Brooks, "A Memorandum to President Worner et al.," Colorado College Document, April 3, 1970.

mixed during the first year. Nevertheless, by year's end the first internal evaluation results, based on faculty and student questionnaires and interviews, were decidedly positive. One could detect a growth of cautious support even among some of the more skeptical faculty. At the end of the first year, Professor J. Glenn Gray, who originally opposed the Plan on pedagogical grounds, could report that enthusiasm on the part of his students far outweighed pedagogical principles. Seventy-three percent of the faculty were willing to express highly or moderately favorable support after the first year, whereas eighty-nine percent of the student body was supportive. For its part, the faculty decided on November 22, 1971, to extend the experiment through the 1974-75 academic year, at which time a formal vote regarding continuance, continuance with modification, or abandonment of the experiment would be taken.

Developments during these early years of the Block Plan continued to confirm a growing acceptance on the part of all constituencies. The faculty acknowledged many of the academic benefits which early proponents of the Brooks' proposal had said would be forthcoming. The one-to-one correlation between the course load of students and the teaching load of faculty resulted, as predicted, in an average class size of between thirteen and fourteen students during the early years of the experiment. Corresponding to the smaller class size at the College, the faculty and students reported an unusually high rate of class attendance accompanied by significant gains in the areas of students' involvement in and preparation for classes. In addition, the elimination of time conflicts with other courses helped to create a climate of experimentation and innovation, especially in the area of off-campus and field courses. The absence of bells or attempts to monitor instruction was received positively by both students and faculty who seemed to enjoy the challenge of freedom to make the best possible use of time available for a given course. Certainly one of the most welcome advantages of the Block Plan was the relative success the College had in attracting outstanding visiting faculty and scholars, many of whom were able to free time to teach during all or a portion of a three and one-half week course.

As forecast by Brooks, the Plan significantly altered teaching approaches at Colorado College. A few faculty in the first year attempted to put old wine into new wineskins by trying to adjust old lecture notes and semester formats to the block system, mainly in utilizing the extended half-course option. But early on there was a noticeable shift away from the lecture as the primary pedagogical method. The diminishing role of the lecture method underscored perhaps the most significant change caused by implementation of the Colorado College Plan, that is, the more active involvement of students in the educational process. Seminars, tutorials, programmed learning, field trips, student-led discussion groups, individual- and group-directed study, problem solving sessions, laboratory courses and studio-centered instruction became more characteristic under the Plan than simple lecturing.

One immediate benefit of the Plan, which has been fairly well maintained, was a more equitable distribution of enrollment across the three divisions. Most notably was a dramatic enrollment increase in the natural sciences. No doubt, the decision to limit the maximum size of courses to twenty-five accounted in part for this increase by causing some students to take natural science courses who ordinarily might have shied away from the division. However, the evaluation program has indicated that other decisive factors affecting natural sciences enrollment have been the steady addition to the curriculum of courses for the nonscience major and the elimination, according to many students, of the fear of taking a science course which, under the multiple-course semester system, had involved stealing time from other academic commitments in order to meet the course's demands. Of course, enrollment patterns throughout the seventies continued to reflect the vicissitudes of student responses to career goals and job opportunities, but the overall leveling effect of the Block Plan on enrollment patterns was an important benefit.

But there were also problems which arose early in the history of the Plan which required attention and solutions. As early as the first year, faculty began citing the problem of inadequate courserooms as a major detraction from teaching effectiveness under the Plan. Two of the major academic buildings, Armstrong Hall and Palmer Hall, were almost universally considered sterile,

ill-equipped, acoustically difficult buildings not suited for the more spontaneous modes of teaching dominant under the intensive-course calendar. "Armstrong Hall reminds one of a hospital ship--huge, antiseptic, engines humming," remarked one faculty member, and another threatened, "Do something about Palmer Hall or I will vote to abolish the Plan."[14]

There is no doubt that in the faculty's view the single most serious problem to emerge because of the change to a new calendar was an increase in work load. Many have had second thoughts about the decision to teach, in most cases, all nine blocks in the academic year. The persistence and intensity of faculty concern over its work-load led the Dean of the College to establish an ad hoc committee which investigated this problem in meetings throughout the fall of 1972. In a lengthy report to the faculty, the committee noted the high correlation between work load and the extent to which certain courses in the curriculum could be adapted to the intensive block calendar. Also, it was discovered that many instructors were, if anything, too conscientious and were spending large numbers of informal and formal hours with students. The committee noted that many faculty tended to teach nine one-block courses, thereby intensifying their work load. It became clear that the Plan's promised "more time for professional development" was not being realized. No one, for example, had calculated the new time dimension which simple housekeeping chores took on in laboratory courses under the Plan. As a result of this early study, steps were taken to remedy the work load problem. Several paraprofessional appointments were added to the budget in certain departments to help relieve the faculty, departments were urged to schedule more two-block offerings, and so-called low enrollment courses were encouraged for faculty who found themselves teaching a preponderance of courses with twenty-five students. As a response to faculty complaints about the added pressures of time in the two three-week blocks, the

[14] James B. Levison and Maxwell F. Taylor, eds., The Colorado College Plan: A Report of the Internal Evaluation Program, Colorado College Document, May 1974, pp. 100-101.

first significant modification of the Plan occurred in 1973 when Blocks I and IX were lengthened to three and one-half weeks; the faculty extended the academic year by five days to relieve its work load! The Work Load Report became the basis for continuing discussion of a reduced teaching load for all faculty, and it provided the direction for the College's Faculty Development Program funded in 1978 by The Mellon Foundation. (See Appendix C.)

From the perspective of the faculty, two other enduring problems have accompanied the development of the Block Plan--the failure of half-courses and an academic fragmentation seemingly inherent in the block system. Advocates of extended time for certain types of courses were disappointed by the limited success and ultimate failure of the half-course option. Low enrollments and lack of enthusiasm by both students and most faculty caused half-courses virtually to become nonexistent in the curriculum by the late seventies. Students frequently complained that "half-course" was a misnomer; that in reality instructors expected a full commitment of the student's time instead of recognizing the dual commitment of students enrolled in these courses. In brief, it seems that the old lure of time-stealing apparently was too tempting even on a limited scale. Students also complained about the limited choices as the number of half-courses diminished in the curriculum, and they expressed dissatisfaction that ten-and-one-half-week half-courses took up too many blocks in a year's schedule. The faculty attempted to revive the half-course by finally approving a seven-week half course option in 1975, but by and large they began turning to other solutions for the problem of extended time. In most cases, satisfaction was achieved by relying on the seven-week (two block) intensive-course as an alternative. Many have simply concluded that the block calendar does, in fact, emphasize specialized, in-depth study with a corresponding reliance on student initiative and independence required to fill out resulting gaps in the coverage of material.

The tendency toward a fragmentation of the curriculum under the Block Plan had been anticipated (back in the late sixties) by critics of the Brooks' proposal. To insure necessary flexibility in course selection, the Registrar developed a successful, computer-ized course registration process which some describe as a "free

market" system. It has not been surprising that for many students and their faculty advisers achieving an integrated course of study, especially at the freshman and sophomore levels, has been difficult. Deepening concern over this problem which strikes at the central liberal arts purpose of the College has led the faculty to consider solutions. So-called linked-block, interdisciplinary sequences of courses such as the "Renaissance Semester," the "Medieval Semester," and most recently the "Science Semester" represent small scale attempts to achieve integration. The recent appointment of an ad hoc committee, chaired by Professor Richard Taber of the Chemistry Department, was a response to continuing faculty concern about the Plan's impact on general education at Colorado College. It is expected that a recommendation for a significant new educational program will be the outcome of this committee's work.

In summary of this discussion concerning the impact of the Colorado College Plan on the academic program, one should keep in mind the principle assumption which undergirded the faculty's decision to change the College's calendar. The faculty assumed that learning and effective teaching would increase in proportion to the learner's active participation in the educational process. By reconstituting the academic calendar in such a way as to encourage the more active involvement of students and faculty with one another, the faculty expected a balance in favor of educational gains outweighing educational losses. Early conclusions indicated that the Block Plan's intensive-course system has made it somewhat more difficult to impart comprehensive factual knowledge. Insofar as effective education consists of dissemination of knowledge through the chief teaching method of lecturing, Colorado College may have lost ground. But, if the primary components of a quality liberal arts education include the infusion of young minds with a desire to learn, the provision of the critical tools of logical and penetrating thought, special opportunities for developing spoken and written clarity of style, appropriate methodologies, and knowledge of where to continue searching, then Colorado College almost certainly has made impressive gains.

II. NONACADEMIC AFFAIRS AND THE COLORADO COLLEGE PLAN

From its earliest inception, the Brooks' proposal emphasized the creation of a community of learning as the ideal goal of the so-called "master plan" for the campus. To this end, the Planning Office from an early date generated considerable discussion of cultural, extracurricular, residential, recreational, and athletic programs as important and necessary dimensions of a quality liberal education. It was proposed that these wide-ranging leisure activities should be formally organized as a leisure program to insure their integration with the academic program of the College. At the same time, Brooks and his supporters cautioned that the College should not presume to organize every leisure activity of its students and faculty; that, indeed, spontaneous and voluntary participation in a rich variety of informal as well as formal nonacademic activities should be the result of better control of time promised by advocates of the one-course-at-a-time calendar.

Since the Colorado College Plan rested firmly on an educational philosophy which stressed the initiative to be taken by students as participants in their own education, not just observers, mention should be made of important changes regarding campus governance which paralleled the development and adoption of the Plan. In February 1967, students, faculty and administration, with the Board of Trustees concurring, approved a new, tripartite form of campus government as a replacement of the Colorado College Student Association. The new Colorado College Campus Association, which was implemented in the fall of 1968 and which continues today, has a membership of twelve students, three faculty and two administrators. The new association was developed for the purpose of creating "a basis for cooperative action" among the various constituencies. Almost simultaneously, a presidentially appointed, ad hoc joint-committee of students and faculty presented a position paper on student rights and responsibilities which signaled the official end of in loco parentis and established an educational philosophy recognizing the right and ability of students to participate in the educational decision-making process. In short order, the College eliminated restrictive rules and regulations concerning residence hall hours and visitation policy, made plans for the first patterns of coeducational living, and established new judicial proceedings for disciplinary cases.

The cycle leading to full participation in campus affairs for students was completed in the fall of 1970 when, in addition to the implementation of the Block Plan, virtually all remaining standing committees of the College were opened up for student membership, and student members of the Colorado College Campus Association as well as students on the Committee on Instruction and other committees making reports to the faculty were invited to faculty meetings as nonvoting participants.[1] These parallel developments were invaluable not only in insuring the successful implementation of the new academic program but also in aiding the effective growth of successful leisure and residential programs.

Proponents of the Block Plan also assumed that, should the new calendar experiment prove successful, ongoing concern would have to be given to bringing the entire physical environment of the campus into better line with the central educational purposes of the Colorado College Plan. Thus, the adoption of the proposal in October of 1969 presented important ramifications for overall campus design and the management of physical space for the entire campus environment. At the same time, administrative leaders in the early years took care to avoid a simplistic decision to add or remodel facilities in a hasty and ill-conceived manner and instead opted for a program of gradual adjustment of space and buildings in response to proven needs.

The Leisure Program

The Leisure Program suffered from a lack of organizational structure and cohesive leadership during the early years of the Plan's development. In the first year of the Colorado College Plan (1970-71) "leisure activities" were loosely organized through

[1] In a bold move, the faculty gave students equal voting power with the faculty on the Committee on Instruction, the deliberative body that prepares the agenda for faculty meetings. Only the Student Aid Committee and the Dean's Advisory Committee, which among other things, makes recommendations regarding academic suspensions, remained closed to student membership.

faculty-student committees with an overall faculty chairman attempting to coordinate the work and activities of these diverse interest groups. This early Leisure Program featured a Public Lectures Committee, a Student Forum Committee, a Symposium Committee and the Rastall Student Center Board, all of which developed budgetary needs and scheduled activities independent of one another. The residence hall program, which Brooks had seen as forming an important third area of educational focus, seemed disaffected from both the academic program and the Leisure Program. Physical activities such as intramural sports and outdoor recreation activities, though functioning well, were not integrally tied in with the leisure program organization. It is not surprising, therefore, that students and faculty expressed growing dissatisfaction over erratic and duplicative scheduling of leisure events and called for more effective coordination and organization of cultural, extracurricular and recreational programs. A relatively simple solution to the problem was found by the beginning of the 1971-72 academic year. First, administrative support for the Leisure Program was provided by assigning the Director of the Rastall Student Center responsibilities for overall coordination of leisure activities on campus. Second, the various constituencies of the Leisure Program successfully proposed the establishment of a Leisure Program Policy Committee which immediately accepted the challenge of defining more clearly its areas of interest and of clarifying its role vis-a-vis the residence halls, the athletic program, and the academic program. An expanded series of student-faculty subcommittees emerged, each of which was represented on the policy committee of the Leisure Program. The leadership of the Leisure Program over the years has fostered an atmosphere of open membership inviting faculty members and students to participate in areas of their interest although faculty and student leadership in the form of cochairs for the several committees is clearly defined on a yearly basis.

The Leisure Program has featured the following committee organization for the past several years:

1. The Folk-Jazz Committee, which is almost entirely student controlled, seeks to provide the College community and the city with a source of live musical entertainment of a nonclassical genre.

2. The Cocurricular Committee funds proposals received from students and faculty which serve the cultural life of the College as a natural extension of its academic program, and it sponsors a weekly Thursday-at-Eleven lecture series.

3. The Film Series Committee seeks to make cinema more easily available to the campus for the purpose of complementing the educational goals of the College as well as providing a source of entertainment for the College's constituencies.

4. The Extracurricular Committee provides a diversity of nonacademic programs such as social events and other activities which are campus-wide in focus.

5. The Outdoor Recreation Committee presents seminars, clinics and particularly trips which are designed to give students, especially those with limited experience in the outdoors, opportunities to expand their educational environment beyond the academic program.

6. The Arts and Crafts Committee offers studio classes or workshops in pottery, batik, jewelry, photography and silk screening with stress placed on relaxation and enjoyment as the goals of the program.

7. The Experimental Student Grants Committee functioned until 1978 as a separate body which provided funds to support student-initiated projects, experimental and creative in nature, which would have an impact on the campus as a whole. The committee was discontinued on the grounds that the Colorado College Campus Association (campus government association) would continue its practice of funding student projects and on the grounds that the Arts and Crafts and Extracurricular committees could absorb much of this area of interest.

The Leisure Program stands as one of the most impressive accomplishments of the Colorado College Plan, frequently cited in student and faculty evaluation surveys for its contribution to the campus' educational goals. The rich variety of programming made possible by a yearly budget in excess of $70,000 now, continues to complement the academic life of the College. (See Appendix C

for an example of yearly programs.) As the Leisure Program has continued to develop by using joint student and faculty leadership effectively, there has been a corresponding deemphasis on the need for a "policy committee" per se. Instead, the program now functions extremely effectively under the flexible control of a Leisure Program Committee, composed of the student and faculty representatives of the various operative committees, faculty and administrative representatives, and a student and faculty cochair.

The Residence Hall Program

In stating his case for the Colorado College Plan, Glenn Brooks had analyzed the discrepancy between the official rhetoric of orderly, well plumed living units on campus and the stark reality of residence halls in 1969 which were being systematically destroyed from the inside out by students frustrated by their lack of control over time and demands under the semester system. In an earlier question and answer session during the planning periods one faculty member had rhetorically mused in response to Brooks' pessimistic analysis of "residence hall ghettos" that no doubt the problem would be solved by "a spreading geniality created by the central warmth of the students' relation to the curriculum" under the proposed Plan.[2] As one might have suspected, the implementation of the Colorado College Plan did not prove to be an instant solution to the residence hall environment on campus. But ten years later, most would argue that residential life at Colorado College is vastly improved. As called for in the Colorado College Plan proposal, residential policy has been developed to provide better connections between academic life and residential life. Residence hall programming is coordinated with the Leisure Program, intramural athletics, and the academic program in recognition of the fact that the housing of students is a central element in liberal arts education providing special opportunities for enhancing students' personal growth and educational maturity.

[2]Direct quotation from George F. Simmons, Transcript of the Faculty Fall Conference, August 30, 1969.

The College has provided budgetary support including the addition of three professional staff appointments who have responsibilities in the large dormitories for supervising more than thirty student Resident Advisers while sharing joint responsibility for programming and relating residential life to the campus as a whole. Some of the smaller residence halls continue to provide lounge space periodically for "courserooms" in support of offerings in the curriculum, and the residence hall symposium has become a major vehicle for addressing a rich variety of cocurricular and extracurricular interests. The expanding pattern of coeducational living has contributed significantly to the gains achieved in residential life. For example, one or two of the smaller halls have become "theme houses" providing groups of students the opportunities of pursuing special extracurricular interests such as arts and crafts, and three language houses continue to attract students who are interested in a cross-cultural living experience.

In summary, the residence hall program has been a major force in giving those students who are willing a greater sense of living in a coherent community. One of the most essential undertakings of the Colorado College Plan was to build more effective small scale groups for the individual student. Some believed that under the semester system at Colorado College too many students were caught between two poles--either being drawn into tight-knit cliques or else becoming atoms in the mass of the student body. The residence hall program has, it seems, reduced the chances that students will live in social or academic limbo during their years at the College.

Physical Activities

For some years prior to the adoption of the Block Plan, Colorado College had lacked the physical facilities to support a strong, general sports program for all members of the College community, although impressive records of competition in traditionally male-dominated intercollegiate sports had been compiled. Competition intercollegiately for women, prior to the early 1970s, was limited primarily to tennis and alpine skiing. However, in the 1960s an Olympic-size swimming pool and an ice rink were added to the College's sports complex stimulating a rapid growth of intramural, recreational and intercollegiate activities in these

areas. But a modern gymnasium was still needed and in 1969 ground was broken for the construction of the El Pomar Sports Center to replace the outdated and inadequate Cossitt Hall.

In anticipation of the construction of the new sports center, scheduled for completion in the early 1970s, the Brooks Planning Office reports had called for the forging of new links between academics and various physical activities believed germane to a strong liberal arts program. Brooks stressed that the new Plan would require a versatile physical activities program for men and women, but no one fully anticipated the dramatic increase in sports activities of all kinds which would emerge in the decade of the seventies at Colorado College. Perhaps of most significance was the rapid growth of participation in intramural and intercollegiate sports by women. The traditional women's tennis and skiing intercollegiate teams were joined by intercollegiate competition for women in volleyball, field hockey, basketball, cross-country running, track and field, and soccer. The College has added staff and facilities to meet the new demands of women's intercollegiate programs. Traditionally strong men's programs in intercollegiate baseball, basketball, cross-country running, football, golf, ice hockey, lacrosse, soccer, tennis, skiing, swimming and track have been augmented by club teams in rugby and squash.

But the most impressive evidence of increased involvement of students in various physical activities has been the steady increase of participation in intramural programs and various formal and informal recreational activities. As examples, one-third of the student body participates in intramural ice hockey each winter and almost one-half of the students are involved in intramural softball in the spring.

On the recreational front, students and staff have joined the jogging phenomenon in startling numbers, and upwards of three hundred participants toed the mark for the first annual "Deans' Challenge Cup," a ten thousand meter run jointly sponsored by the Leisure Program and the Dean of the College's office. Overall, it is estimated that approximately eighty percent of the students at the College engage in some form of physical activity whether it be intercollegiate, club, recreational, intramural or simply taking advantage of the mountain location of the College.

In summary, the significant point of this survey of physical activities by students and staff is the fact that there is time for developing interest in this important area of liberal arts education. Some had feared that the projected intensity of the one-course-at-a-time plan would prove detrimental to such pursuits. Advocates of the better-control-of-time idea to be gained by the new calendar predicted, perhaps accurately, that there would be an increase in general student participation as more adequate facilities became available and competing academic obligations were diminished. At any rate, the life of the mind and the life of the body seem to be coexisting well under the Colorado College Plan, so much so that the authors of a recently adopted policy governing intramural, recreational and club sports at the College felt it important to state formally a governing philosophy of sport:

> Colorado College believes participation in sports to be an integral part of a well-ordered program of liberal education and, therefore, encourages the widest possible participation in sports by individual members of the College community. The College is especially interested in sponsoring and encouraging participation in those sports that contribute to the development of health and physical fitness and that have a definite and proven carry-over value to later life. The College is particularly committed to a philosophy of sport which stresses the value and enjoyment of participation in the physical testing of oneself and which challenges individuals to develop their physical capacities. To achieve these goals Colorado College offers a variety of programs and facilities--an extensive intramural program, both formal and informal recreational activities, club sports, and classes in physical education.[3]

[3]Gordon Riegel and Anthony Frasca, eds., The Colorado College Intramural Handbook, Colorado College Document, August 1979, p. 1.

Admissions

One area of special interest, especially to outside observers, has been the possible impact of the Block Plan on the College's Admissions program. Some have assumed a correlation between the adoption of the Plan and a need for more applicants by asking whether or not the number of applications has increased since the calendar change was implemented. And other questions are posed rather consistently. Has the Admissions Office found it necessary to rethink its philosophy and seek a different kind of student because of the special demands of the Block Plan? Does the Block Plan attract a special type of applicant? Has the attrition rate in the student body gone up as a result of dissatisfaction with the intensive-course calendar? The answer to these questions seems to be a qualified no.

Mr. Richard E. Wood, Director of Admissions at the College since 1961, points out that the upward trend in applications to the College began sometime prior to the Block Plan, the first significant increase being in 1969 when 2,200 applications were received for the freshman class. (See Appendix D.) In 1970 the dramatic increase continued as 3,068 freshman applications were processed. The peak years were 1971 and 1972, the second and third years of the new calendar. Since 1976 applications have dropped back to a range of 2,000 to 2,200 for the freshman class each fall.

The Admissions Office contends that the Block Plan has not especially affected the number and type of applicants; that over the years since the implementation of the Plan percentages of applicants received from geographical regions and the general range of applicant quality or diversity have remained consistent. The results of freshmen evaluation questionnaires received from students entering in 1973 and 1974 lend support to the contention that there is only a qualified correlation between applications and the Block Plan. Seventy-six percent of the freshmen who entered in 1973 and sixty-nine percent of those entering in 1974 indicated that Colorado College was their first choice of schools. Of these entering students, eighty-nine precent (1973) and eighty-one percent (1974) indicated that the Block Plan was a very important consideration in their decision, but by no means the only important factor. Students who entered in 1973 gave equal importance to "high academic reputation" (80%), "location" (90%),

and "small class size" (88%). The class entering in 1974 also stressed strongly as either (1) very or (2) somewhat important "high academic reputation" (1) 73%, (2) 23% , "location" (1) 60%, (2) 32% , "small class size" (1) 84%, (2) 14% , "good preparation for graduate or professional school" (1) 46%, (2) 34% , and "student body size" (1) 72%, (2) 24% . Fifty-five percent (1974) and thirty-three percent (1973) were willing to cite the Plan as the most important consideration in their choice of the College, but it seems evident that the Block calendar alone does not account for a persistently favorable application picture during the past decade.

The one area of admissions, where a direct correlation between an increase in number of applications and the implementation of the Block Plan seems to exist, is transfer student interest in the College. The dramatic increase in applications from transfer candidates began with the Block Plan years, and it appears true that the Plan serves to call Colorado College to the attention of many applicants who are looking for an innovative or unusual program. Nevertheless, interviews with transfer students have indicated that ultimately the deciding factor in their decision to apply was "the kind of place" the College represents. Once again, size, reputation, location, quality of faculty, the liberal arts purpose and so forth were underscored as important factors in the decision to accept the College's offer of admission. (See Appendix D.)

The intensive-course calendar has not caused any significant increase in attrition rates at the College. Recent Admission Office studies show that between sixty-five and seventy percent of those students who enter eventually receive a degree, a statistic that is impressive among liberal arts colleges today. Analysis of withdrawals from the College during the Block Plan period indicate that no more than one percent of those students who leave do so as a direct result of the Block Plan and only five percent cite the Plan as a partial reason for their decision not to return. Instead, one might argue that general satisfaction with the Colorado College Plan in all of its aspects has been the major reason for an average annual attrition rate among returning students of approximately eleven percent. Related to the general attrition picture is the sharp drop in academic suspensions under

the Block calendar. In the 1969-70 academic year, the last year of the semester system, fifty-eight students were suspended for academic reasons. The average number of academic suspensions for the final six years of the semester system was 45.5 as compared to an average of only 11.44 students under the Colorado College Plan. (See Appendix E.) Students are less likely to suffer severe academic problems under the Plan. Academic Warning status has also dropped drastically. Small class size, teaching effectiveness and the fact that personal setbacks, which are usually shortrun and effect only one course under the Plan, all are given as reasons for the sharp drop in academic suspensions. Moreover, the academic accomplishments of students under the Plan in terms of awards and recognition, admission to graduate and professional schools, and performance on standardized tests such as the Graduate Record Exam, have remained at a consistent level for years prior to and succeeding the Plan's implementation.

In summary, the Admissions Office's operation during the Block Plan years has been characterized by a purpose and philosophy consistent with those years preceding the implementation of the new calendar. Hence, conscious efforts have continued to attract a diverse student body representing in so far as possible a wide range of geographical, ethnic, social, religious and economic backgrounds. In the process, deliberate steps have continued to avoid an elitist extreme in selecting the student body.

The Library

In preparing for the transition to the Colorado College Plan, Dr. George Fagan, Director of the Charles Leaming Tutt Library, assumed that the library would be one of those facilities most directly influenced by the expected transformation of the College's educational environment. He postulated that the library under the Block Plan would become even more of an integral part of the teaching-learning process with a resulting transformation of the traditional view of the library as a conservator of the past. Dr. Fagan speculated that the library would gradually become more of an information center or laboratory in which students and faculty would find more opportunities to work together and in which distinct patterns of student independent study would emerge. In short, he envisioned an enhancement of the library as a vital instructional tool under the Block Plan.

Plans were made by the librarian and his staff to redesign and restructure the library's resources and services in preparation for the Plan. In cooperation with the Library and Teaching Resources Committee and the faculty as a whole, a first priority has been the acquisition of a comprehensive collection structured to meet the needs of the College community under the Plan. Over the years, a priority has become the acquisition of reference materials, indexes, abstracts and related bibliographical tools to balance standard works in all fields of human knowledge. Not to be overlooked are the special demands on book and periodical selection wrought by the sweeping transformation of almost an entire liberal arts curriculum since the Plan began in 1970. In response to curricular developments, the character of library holdings has shifted away from the previously dominant western civilization base as programs in Asian and Eastern European studies, the Southwest and Latin American studies have developed.

A second priority has continued to be the development of a well trained, competent staff capable of interpreting collections and assisting students and faculty under the admitted time pressures of the intensive-course calendar. The staff conducts regular library-use sessions for classes and individuals and special orientation sessions for new students are conducted at the beginning of each semester.

The influence of the Block calendar on patterns of library use has been carefully documented by attendance and book circulation statistics which have been maintained for the past ten years. Unfortunately comparable statistics for library use prior to the Plan are not available. Nevertheless, Dr. Fagan points out that available evidence which does exist before 1970 supports the view of Colorado College as a typical small liberal arts institution regarding library usage. Formerly, book circulation and general use of the library tended to cluster around distinct time patterns, namely a brief early flurry at the beginning of each semester which was repeated at midterm and final examination time. Under the Block calendar, however, a constant use pattern has predominated. Attendance and book circulation are amazingly consistent over the nine blocks although there are slight drops during Blocks V and IX which precede Christmas break and

summer respectively. As was expected, the library staff has noted an increase in pressure on its time as students have sought more help because of greater emphasis on papers requiring research and reference assistance. In fact, consideration is currently being given to adding to the curriculum an adjunct course (one-quarter unit credit) on use of the library. Still, the librarian is of the opinion that the faculty and students have only scratched the surface as far as developing the library as a pedagogical tool under the Block Plan is concerned. Without doubt, the new addition to the library, presently under construction, will further enhance the impressive contributions of the library and its staff to the success of the Colorado College Plan.

Impact On Facilities

The Colorado College Plan in its basic design involved almost a complete revision of the traditional concepts of a course, a classroom, a contact hour, academic credit, scheduling procedures, and definitions of academic and nonacademic space. Therefore it was necessary for the College to alter virtually all of its conventional approaches to space management as a function of converting to the new calendar. Even though the short-range decision was to avoid major remodeling and refurnishing for an experimental period of approximately two years, there were nevertheless some immediate financial ramifications. In preparation for conversion to the Plan in the fall of 1970, academic departments and administrative offices were surveyed to assess necessary financial increases required by the changeover. It was determined that approximately $150,000 would have to be added to the 1970-71 budget.[4] About one-fourth of this total concerned changes in the physical plant with the remainder designated primarily for special once-only expenditures such as new lab equipment, minor modifications of ce[illegible]in large classrooms and staff support.

[4]Colorado College was very fortunate to be the recipient in 1970 of a Ford Foundation Venture Grant. A matching grant of $150,000 was received for a three-year development period.

The major task during these early experimental years was that of adapting the College's old physical environment to serve the best interests of a new educational process. An early challenge concerned the necessity of identifying approximately one hundred and ten usable "courserooms" to accommodate classes planned for the opening block of 1970. Outside of the regular academic buildings, comfortable residence hall and fraternity lounges, relatively free from student traffic in daytime hours, were designated for use. Because of the policy to place an upper limit of twenty-five students for all courses taught by one professor and thirty students for those courses taught by two instructors, the College was in a position to predict that approximately ten percent of courses in a block would be in the four to five student range and could therefore meet in the instructor's offices; hence another twelve courserooms were added to the total needed. The College also realized that some courses, because of the added mobility of the Plan, would be off campus and not require campus space. At any rate, the courseroom challenge was met during the experimental period of the Plan's development, although as mentioned earlier, faculty in the social sciences and humanities divisions cited the courseroom problem as a major concern in their responses on internal evaluation questionnaires.

By 1974 when the faculty voted to continue the Colorado College Plan indefinitely, plans were already well underway to meet the long-range physical facility needs required by the block system. These plans included the construction of new buildings, several important remodeling projects, and additional services in the academic, extracurricular and cocurricular areas of campus life.

Packard Hall, a new music and art building, was completed in 1976 and not only provided much needed space for the Music and Art Departments, but also freed space in Armstrong Hall for later accommodation of the courseroom needs of other departments in the humanities division. Packard provides additional facilities for student performances and exhibits and is a main locale for a rich variety of Leisure Program-sponsored events. The El Pomar Sports Center, completed in 1972, has enriched the physical education and general sports programs which have become a vital segment of the Colorado College Plan's total educational focus. The construction, currently underway, of a new addition of the

Charles Leaming Tutt Library will certainly solidify the reputation of this facility as one of the College's most treasured assets. Included in the new addition will be research offices for faculty, a computer terminal area, a late night study center for students, and, of course, space for library holdings and extra services required by increased pressure on the Library brought about by the Block Plan. A final capital improvement which is planned concerns the addition of needed space for the natural sciences. As stated in Chapter I, enrollments in the natural sciences have increased by about thirty-five percent. This increase, when combined with the growth of the student body from sixteen hundred in 1970 to eighteen hundred and fifty in 1979, emphasized the need for an expansion of current facilities in the natural sciences.

Two of the campus' major academic buildings, Palmer Hall and Armstrong Hall, were remodeled and refurnished in 1978 and 1979 respectively. New modular furniture, featuring seminar-type tables and chairs, replaced old desk armchairs and lecterns and rooms were carpeted, draped and acoustically tiled to create environments more conducive to the small group, discussion format characteristic of most classes under the Block Plan. In addition, more seminar-size rooms were provided in the remodeling by subdividing some of the larger lecture rooms. Other smaller remodeling projects have taken place. For example, in the early seventies one of the campus' small houses, formerly used as a residence hall, was remodeled as a center for an expanded Southwest Studies Program which has received development grant support from the National Endowment for the Humanities. Most recently, a remodeling project in Shove Chapel, designed to create additional academic and Leisure Program space, has gotten underway in an attempt to bring this facility more into the mainstream of campus life.

In support of leisure, recreational and sports activities, several campus improvements have been made in recent years, and some are currently being planned. For the Leisure Program, an impressive arts and crafts center, including pottery wheels and a kiln, and a center for renting a wide range of outdoor recreational equipment such as camping gear and cross-country skis were developed as extensions of the student center. On the drawing

board is a mountain cabin designed for use by trips sponsored by the Outdoor Recreation Committee of the Leisure Program. In support of growing student participation, two new tennis courts have been added, and outdoor racketball courts were constructed at one of the large residence halls. The construction of a much needed intramural and practice field is in the final phases.

One of the great benefits of the one-course-at-a-time curriculum has been the steady growth of off-campus and field courses of all types. In response, the College has had to develop and maintain a motor pool which is also used for Leisure Program trips and regional travel by intercollegiate athletic teams. Currently the vehicle inventory consists of one large forty-five passenger and one thirty-nine passenger bus, two seventeen passenger minibuses, a fifteen passenger maxivan, two station wagons, one five passenger sedan, and a nine passenger four-wheel drive caravan.

In conclusion, Colorado College's educational reforms have called for a re-examination of all campus facilities for the purpose of bringing them into accord with educational objectives. In point of fact, during the first nine years of the Block Plan, the campus' physical plant has grown and developed in ways required to enhance the unusual opportunities for teaching and learning under the Colorado College Plan.

III. CHARACTERISTICS OF THE COLORADO COLLEGE STUDENT BODY

The phenomenon of particular student bodies, those that are different from the assemblage of students on most other campuses, or those that are quite distinctive and unlike all other student bodies in certain ways, became a topic of interest in recent decades. This interest was intensified for many in higher education during the sixties. It could even be said that some of the largest public institutions in the country, which traditionally accommodated youth of a great variety of backgrounds and abilities, were composed of student populations, a proportion of which could be characterized as unusual.

Other institutions, among them institutes of science and private universities, have been seen as distinctive, in part, because of their students' extremely high ability level, admittedly a factor that would lead to a predominance of thinking and behavior highly respected in an academic setting, as well as a student culture with a special ethos.

Some of the more selective colleges across the nation also have long been known for the cognitive caliber of their particular clientele, with the students seen as a chief determinant of the reputed high academic press. Other colleges have attributed their distinctiveness to behavioral characteristics other than measured ability. In brief, diversity among the student bodies of the most widely recognized institutions has not been difficult to verify, especially since the end of World War II.

In the creation and development of a number of new colleges since 1960, particular concern was given to the type and caliber of students who presumably would be served. In numerous instances, however, a new program or institution represented a change or presumed improvement to accommodate an existing student body. In these instances, the characteristics of the students were not a major consideration. In other instances, special innovative programs were planned and established with the idea that the majority of the clientele to be attracted would be atypical, if only because of a self-selective process that was frequently concomitant to the idea of change and innovation.

The Colorado College Plan, never strongly touted as an innovation but as a means to vitalize and intensify the undergraduate experience, was not developed nor put into operation with any

ideas about attracting a new or different clientele. It was generally assumed that all the months of planning and deliberation were directed to the better education of the general type of student that had enrolled and continues to enroll at the College. In fact, except for some knowledge about the average mean scores on the Scholastic Aptitude Test and some basic demographic data for the students of recent years, the great majority of the faculty did not know much about their student body as compared to the student bodies in similar liberal arts colleges. All were aware that at least a small proportion of very capable students were included in each first-year class, but they probably assumed that there were more than was actually the case. Most faculty members believed that a large majority of their students were considerably above the national average in general aptitude.

Whatever the source of their information, beyond that of first-hand observations of the students, the faculty's general impressions were not too far from the truth. What they were not cognizant of, like the majority of college faculties, was the reality of the diversity of human beings seeking an education on this single campus. Nor was a majority of the faculty seriously asking about how well the great variety of students was faring, or how many were obtaining a broad liberal arts education.

The Colorado College student body was the major area of concern in the evaluative research program; this concern took a specific focus in the four-year studies conducted on the entering classes of 1973 and 1974. The majority of these students were involved in assessment programs during their early days on campus, and again during the last third of their senior years. They cooperated in releasing a great amount of information about themselves, about their past, their beliefs and attitudes, their college experiences, their reactions to the College and the Plan, and their aspirations. The information obtained from both entering classes permits an adequate description of the students who enrolled at Colorado College three and four years after the new nine-block calendar had been instituted. Since the responses on almost all questionnaire items for the two entering classes (1973 and 1974) were very

similar (never significantly different), the data for the entrants of only one year (1973) will be used to simplify the presentation.[1]

Presumably the designers of the Colorado College Plan, as well as the faculty, raised no serious questions about the qualifications of the particular student body, nor their capability to contend with the challenge and demands of the new calendar and program. And in the early years of the Plan no major changes were made in the recruitment and admission practices of the College. Facts such as these led to increased interest in the learners on this campus. A few questions about the student body were raised at the inception of the evaluation program. The questions, in brief, were the following: (a) Who are the students, where do they come from, and what is their social-cultural background? (b) What are their aspirations and expectations? (c) What are their major values and attitudes, especially those that may be conducive to learning? (d) What proportion of students have a high readiness for and orientation toward academic involvement and scholastic activity?

Such questions cannot be fully addressed here, but a large sample of students who enrolled during the mid-seventies will be introduced with some adequacy.

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[1] The amazing consistency of responses between the students in the two incoming classes is a reflection, in part, on the stable image of the College in the variety of states and communities from which it draws its students and also of the policy and procedures of the Office of Admission. The general direction or "slant" of some responses in the area of attitudes and opinions is undoubtedly due to the "temper of the time" and the type of thinking pervasive among the current youth in the United States.

The consistency of the questionnaire results between the two classes also serves as a check on the reliability of the reporting and responding for each class. The general accuracy of the resulting data is also confirmed by the consistency of responses obtained between the two sexes for each year.

Student Backgrounds And Related Attributes

The high school graduates who enrolled at Colorado College in the fall of 1973 and also responded to the questionnaire survey (53% women and 47% men) came from much of the expanse of the forty-eight mainland states. The largest proportion, however, came from communities within the State of Colorado. Another twenty percent came from the seven middle states where the Big Ten universities are situated. The states on the East Coast, ranging from several in New England and extending beyond Maryland, were the home base for eighteen percent. Ten percent came from the West Coast states. The major sources of students beyond the local state were usually certain concentrated areas, demonstrated by the fact that forty-four percent came from cities with populations of over 100,000, twenty-eight percent of those being from cities of 500,000 or more. Although the origins of students are scattered over an extended geographic range, the specific home bases represent a very nonrandom distribution. The above facts are not unlike the situation for many well-known, selective liberal arts colleges, except that most of them enroll a clientele of higher academic aptitude and much smaller proportions from within the home state.

The major reasons given by students for selecting Colorado College help to account for the fact that over thirty percent came from various outlying areas, a thousand miles and more from Colorado Springs. A list of twenty possible reasons or considerations of importance for the students' choices of this College were presented to the first-year students, asking them to check all that applied. The top six reasons, those that were acknowledged by fifty percent or more of the entrants, are the following:

90% - Location of the College (climate, mountains, altitude, etc.)

89% - The particular academic program (The Colorado College Plan)

88% - Small class size (expected)

80% - High academic reputation of the College

53% - Visited the campus (and liked it)

50% - Good preparation for graduate and professional school

The next two reasons (forty-five percent response for each) and all others, most checked by less than twenty percent, were of another cast and significance. For example, the next two reasons were: Wanted to live away from home--forty-five percent; and anticipated new freedom in handling my personal affairs--forty-five percent. Considering the content and implications of five of the first six reasons that were checked most frequently, a majority of the new enrollees were indicating a degree of logic, relevant to the particular school, in their choice of institution. The data from the ACF-UCLA Cooperative research Program on a very similar question provide some points of reference.[2] The four responses most frequently checked by the freshmen of the same year (1973), who had enrolled in colleges categorized as "four-year colleges of high selectivity," were as follows:

75% - Has a good academic reputation

28% - Wanted to live away from home

28% - Offered financial assistance

24% - Offers a special educational program

Although the lists were not comparable, in that the Colorado questionnaire included twice the number of reasons (choices), the general emphasis of the Colorado pattern of high responses on items of particular content, and the great differences between Colorado and the "high selectivity" schools in crediting a special or particular program (eighty-nine versus twenty-four percent) permit one to conclude that Colorado College seemingly admitted

[2]Cooperative Institutional Research Program, The American Freshman: National Norms for Fall 1973, Los Angeles: Graduate School of Education, University of California, 1973.

a large proportion of applicants who had a special rationale for their choice of institution. Obviously, the fact that a great majority checked three or more responses implies that they were aware and cognizant of significant aspects of the College's program.

Beyond the attention specifically given to an academic or intellectual orientation, most social science researchers have credited religious belief and political attitude as other important aspects of students' value orientations. In both spheres, clues to students' liberalism versus conservatism have been given chief consideration, with the former being seen as more frequently related to an openness to learning and an intrinsic interest in academic pursuits. Research results in support of such a general relationship (that is to say, between religious and political liberalism and the degree of "learning readiness") have been most often reported in the findings of studies involving selective colleges and universities.

The students at Colorado College, as witnessed in the entrants of both years, came from homes and parents, for the most part, who acknowledged or professed a religious affiliation, or the values and beliefs associated therewith (as reported by the sons and daughters). But the sons and daughters, in significant numbers, at ages seventeen and eighteen indicate a lessening commitment to religious affiliations and beliefs. Such findings are in keeping with the changing religious ethos, especially for the younger generations, throughout much of the Western culture, as has been more and more manifest in polls and studies since the late sixties. The evidence for such trends is more likely to be seen in private nonsectarian universities and colleges, and the more selective the institutions (on the basis of academic aptitude and scholastic achievement), the greater the tendency for students to be more relaxed about, if not rejecting of, their religious heritage. Some of this phenomenon may be explained by the "normal" rebellion of adolescent and post-adolescent youth, by the prolonged identity crises of some, and for others, as part of the transition of leaving home and going off to college to find themselves. Whatever the various explanations for individuals and groups of students, the fact remains that the youth, chiefly from fundamentalist religious backgrounds, who pursue their undergraduate education in non-

sectarian colleges tend to be less involved in the religious sphere, which fact is contingent upon the selectivity of the institutions (the latter being a correlate of the academic aptitude of the student bodies).

The religious affiliations and beliefs of the parents and students of Colorado College are shown in Table 1, along with the comparative data for students enrolled in nonsectarian colleges of "high selectivity."[3] The Colorado students were asked first about "which of the following categories comes closest to the religious values predominant in your parental family?" And, second, "which one of the following most accurately describes your religious affiliation and/or beliefs?" The response categories were the same in each case. In the twenty other, high selectivity colleges, the freshmen were asked about their "current religious preferences." The response categories were much the same, except that the major Protestant denominations were separately listed.

The differences between the Colorado students and the reported predominant religious values of their parents run through most response categories, with significantly larger proportions of students indicating no religious beliefs or a combination of beliefs than the proportions that adhered to the religion of the parental home. The biggest shift from the religion of one's upbringing was among the students from the Protestant faiths, with fifty-eight percent (of the original fifty-two percent) "assigning" their present form of belief to another category. (The shift away from the parental religions was very similar in 1974, although only fifty percent of the youth from Protestant homes in this class as compared to fifty-seven percent, subscribed to no religion or a combination.)

The data available for the freshmen in the twenty other selective, nonsectarian institutions suggest that the larger proportion of seventeen- and eighteen-year-old college entrants have not left

[3] Op. cit., pp. 11-13. The nonsectarian, high selectivity category included 20 four-year colleges whose average mean scores on the SAT V+M ranged between 1150 and 1249.

TABLE 1

Religious Affiliations and/or Beliefs of Colorado College Freshmen and Their Parents and the Freshmen in Twenty Nonsectarian, High Selectivity Colleges (Results in percentages, all reported by students)

Affiliation and/or Belief	Colorado Parents	Colorado Freshmen	Other College Freshmen
Protestant	52	22	45
Roman Catholic	15	11	24
Jewish	8	4	7
Mormon	0	0	0.2
Eastern religion	0	1	0
Christian Science	1	1	0
Combination of religious beliefs	6	17	(No such category)
No formal religious beliefs	12	28	18
No religious beliefs	3	12	
Other	3	4	6

the religion of their heritage at this stage in life. Viewing the Colorado entrants in this context, one may raise questions both about the reasons for so many early changers in this College and the implications of the same--regarding academic motivation, a continuing ethical orientation, and the possible anxieties of a transitional period.

The fact of their being in a transitional period, in which they at an early post-adolescent period are changing attitudes and values, is somewhat substantiated by their political outlook. The results shown below were in response to being asked about the political group with which they and their parents were most sympathetic. Assuming that in their earlier years (ages twelve to fifteen) many of them most likely subscribed to their parents' party preferences, a significant proportion have already made a shift to what is described generally as a more liberal and questioning perspective.

Political Affiliation	Mother	Father	Self
Republican	49%	50%	16%
Democrat	35	34	28
Independent	12	12	32
Other	1	1	3
None	3	3	21

Some support of the students' liberalized orientation is obtained from their responses to a question on political attitudes. Shown also are the responses for samples of entering students in twenty private, nonsectarian, high selectivity colleges.[4]

Because of a difference in the number of response categories, the results for Colorado and the other selective institutions are not directly comparable. (An analysis of the differences in the distribution on the five comparable categories is significant at the .01 level.) The fifty-two percent of Colorado entrants in the top two categories (which was equally true for both sexes), as compared to the seven percent in the conservative category, is in line with the sixty percent who categorized themselves as

[4] Op. cit., Cooperative Institutional Research Program.

democrats or independents in their political affiliation. This is seen as a significantly large proportion of post-adolescents with such commitments on one campus.

Political Attitudes	Colorado Freshmen	Other College Freshmen
Radical or far left	5%	3%
Liberal	47 (52)	41 (44)
Moderate or middle-of-the-road	25	41
Conservative	7	14
Very conservative	0 (7)	1 (15)
Anarchist	1	No such
Non-political	8	
Uncertain	7	categories

A majority of students who entered Colorado College in the fourth and fifth years of the Colorado College Plan were generally of a liberal persuasion. A proportion of this majority probably overlapped quite substantially with the forty percent which professed no religious beliefs or no formal religious beliefs and the four percent which was Jewish. At any rate, many students in these entering classes could readily adapt to new challenges of various sorts in the academic sphere such as provocative demanding instruction, and they could provide a basis for the development of interesting social subcultures throughout the campus.

High School Background For Academic Involvement

The great majority of the students in the entering classes of both 1973 and 1974 had fared well to very well in high school. Almost seventy percent in both classes were satisfied to very satisfied with their high school experiences and only five percent were very dissatisfied. These relative high proportions of very satisfied students attest to the quality of the secondary institutions that many of them attended as well as to the excellent academic records attained by most.

Obtaining good grades was acknowledged as important to extremely important to the parents (65%) of both men and women students, but, at the student level, more women students (74%), as compared to the men (58%), considered grades important or very important. Only five percent or less of both parents and students did not consider grades very important.

In the course of the years of research, the application folders for large samples of entering students were read for four different years. A review of one hundred folders each for the 1973 and 1974 entrants revealed intrinsic interests in learning and a keen involvement in their education on the part of large numbers. These academic tendencies were substantiated by similarly large numbers who expressed enthusiasm and high anticipation about enrolling in what they considered an excellent college, an institution where they believed that their expectations would be fully met.

These positive, academic expectations were, in part, the result of what they had heard about Colorado College, but the expectations were grounded in their successful and satisfactory high school experiences. Success to date led to their anticipations about continuing satisfactions. The substance of earlier successes was implied in some of the students' responses to questions in the freshmen questionnaire. When asked "how important a variety of fifteen high school experiences was in terms of their own personal satisfactions (a question which had four response possibilities, from "not important" to "very important"), the results for the highest four and lowest four sources of satisfaction were as follows:

High School Background For Academic Involvement (continued)

Experiences	Very Important	Important
Self-discovery, self-insight	64%	23%
Coursework in field of special interest	62	33
Individual study or research	46	37
Individual artistic or literary work	36	28
Student government	14	16
Religious organizations or affiliation	9	10
Political activism	7	16
Experimentation with or use of drugs	2	7

The resulting data on these eight experiences, out of a total of fifteen, are the same for men and women students, with one exception, as far as the order of the eight are concerned; the proportions for the males, however, are significantly smaller on each of the highest four experiences in the "very important" response category. Some of the males resorted more to the "important" and "somewhat important" responses. The proportion of men students was larger than that for the women under the "very important" response category for only two experiences or activities--athletics and relations with the opposite sex.

The results to a second question in the questionnaire provided supplementary information, although inferentially, about how the

students thought they had fared and changed during high school. These results also have direct implications about the major concerns and self-perceptions of the students that enrolled in the middle seventies. In this case the students were asked whether they felt they had changed since entering high school on a designated set of eighteen attributes, and the results for the 1973 and 1974 entrants were very similar, varying no more than three or four percentile points. The results are listed below, in order, for all attributes on which fifty percent or more of the 1974 students indicated they had changed by "increasing."

Maturity	97%	Openness to consider other points of view	73%
Self-awareness, self-insight	89	Firmness of sense of identity	72
Intellectual interest	83	Concern with social issues	68
Being "at ease" with the opposite sex	80	Esthetic interest	67
Political concerns and awareness	77	Emotional stability	65
Ability to form relationships	73	Awareness of ethical standards	64
		Political liberalness	51

A summary review of the above data, drawn mostly from questions about the students' high school experiences and attributes about themselves after finishing high school, warrants the conclusion that the entering students, or the majority of them, had a positive attitude toward learning and came to the College with seemingly strong motivation and high expectations of their college education. High school experiences and achievements had resulted in anything but negative perceptions and attitudes, and one could have inferred that the majority were up to the challenge of an innovative program.

Preferences And Attitudes Regarding College Practices And College Life

As mentioned earlier, there is a tremendous variation in the undergraduate programs in the United States system of higher education, even though the vast majority of universities and colleges in both the state and private sectors all offer four years of study for the bachelor degree. But the diversity of programs merely among the four-year colleges is most amazing, including variations that can be witnessed in the size of the total curricula (number of courses), the liberal arts requirements, the definition and requirements of major fields, the extracurricular programs and so forth. In short, a Bachelor of Arts degree is representative of a multiplicity of undergraduate experiences and a breadth of varied academic attainments.

The matter of differences among colleges is of significance here because many of the students that enroll in liberal arts institutions have certain objectives in mind, as well as certain expectations of an institution, when they make a choice of a college. Because there are hundreds of colleges across the states, a number of which are considered very good or excellent, it is difficult to defend the idea of one best place for specific students. Each year, however, thousands of youth, with the encouragement of their parents, are desirous of being admitted to the college of their first choice.

In the case of Colorado College, seventy-three percent of the two entering classes stated that this college was their first choice and twelve percent considered it their second. This total of eighty-five percent should be a major factor in persistence and retention, since they were all persons who were admitted to a school to which they gave major preference; ninety percent of that total indicated that they had been well informed of the College Plan, and to them it was the most exciting or stimulating aspect of the College. This fact, together with what the great majority of Colorado students sought or desired in a college, suggests that the students who enrolled did not get on campus by chance. They may have been recruited by the College, but they and their parents made the decision to "try" a school that probably seemed somewhat controversial.

What these young seventeen- and eighteen-year-old students desired in a college is partially revealed below; the responses for

Colorado College are preceded by those of the entrants of the University of California at Berkeley, a selective institution where the mass of admitted students is drawn from the top fourteen percent of California high school graduates.[5] The Berkeley entrants are a very comparable group on a number of major characteristics, including scores on the Scholastic Aptitude Test and attitude scales assessing intellectual disposition and academic interests (as will be shown later).

The responses and the data for the two institutions derive from the following question: If you were to choose an ideal college, which of the following features would you consider to be important for you? Choose one from each pair.

Having just said that the UCB and Colorado students are comparable, as groups, on a number of important characteristics, we find that they vary a great deal on most of the above responses. The greatest differences are concomitant with their choice of institutions and probably are, in part, an artifact of the institutional characteristics, that is, size of institution and the student body and the presumed enrollment policies. Assuming that to be the case, the Colorado Students may see the College's enrollment policies to be more selective than it actually is. But, obviously, they (80% to 98%) were looking for certain features in a post-secondary institution that are quite descriptive of most liberal arts colleges and not a large university.

On the last five sets of paired items, the entering students on the two campuses are much more comparable, though significantly different on all (at the .01 level). Larger proportions (64% to 95%) of the Colorado students gave more importance to intensive academic programs, experimental programs (such as the Colorado College Plan), less emphasis on competition for grades, classes emphasizing independent study (90%) and classes given to discussion and a seminar approach (95%). It is of significance that fifty percent or more of the students on both campuses desired, or considered important, certain aspects of the teaching-learning

[5]The University of California entrants are a large sample of the entering class of 1972.

Preferences And Attitudes Regarding College Practices And College Life (continued)

Univ. of Cal. (B)	Colorado College	Response Choices
47%*	82%	Highly selective enrollment policy
49%	18%	Open enrollment policy
32	95	A predominately residential campus
66	5	A campus where most students live off campus
32	98	Small student body (1,000 to 2,000)
65	2	Large student body (10,000 or more)
--	93	Emphasis on broad liberal arts education
--	7	Emphasis on specialized type of education
49	75	Intercollegiate athletics not emphasized
48	25	"Bigtime" intercollegiate sports part of campus life
50	64	Highly intensive academic program
47	36	Academic program of average difficulty
31	20	Traditional program in most respects
65	80	Experimental program in most respects
28	21	Much competitiveness for grades and recognition
68	79	Little competitiveness for grades and recognition
20	10	Classes with little emphasis on independent study
77	90	Classes with much emphasis on independent study
21	5	Mostly lecture classes
77	95	Mostly discussion classes and seminars

*The figures for the UCB students do not total to one hundred percent because of small percentages that did not respond to the items.

process that are not typical of or evident in the lower division classroom regimen at Berkeley, with the exception of the intensity of the academic program. On the Colorado College campus, these desirable features, with the exception of little competitiveness for grades, are known to exist to varying degrees, contingent upon the policy and practices of the instructors and departments. Regarding the last three items, what the students desire or see as ideal is beyond the reality of program practices on both campuses, with the Colorado College students having the advantage of experiencing the idea much more frequently than the UCB students.

Academic Aptitude And Intellectual Orientation

It was implied at the beginning of this chapter that Colorado College was not one of the institutions that had attempted to change its image by changing its admission policy, at least not in the sphere of measured ability. Some criteria were presumably changed in the decade before the beginning of the Colorado College Plan, such as the recruitment and admission of larger proportions of minority students, a change in the policy of the recruitment of athletes, and stepped-up recruitment activities in outlying geographical regions. But, shifts in such policy and practices had been fairly gradual and continued to be so. Descriptions of the entering classes in 1963, 1967 and 1970, using rudimentary background or demographic information, or family financial level, religious affiliation, or the students' achievement records, would be very little different from the descriptions of the students who enrolled in 1973 and 1974.

Such a statement needs qualifications since there would be some differences appearing over that period, all of a decade, but chiefly in what the students reported about their beliefs and attitudes, and some of their practices. Although the type of families and homes from which the students came did not change, except for the gradual increases of minority youth, the cultural challenges and the upheaval of the sixties, in large part promoted or propagated by college youth, have had a continuing effect throughout the Western world. The ethos and the mores of the adolescent and post-adolescent culture, of the previous generation and the present, are considerably different than they were in the

decade preceding the sixties. Obviously, the contributors to such rather profound changes were more than the phenomenon of protest and a new form of music and song. And the results are to be witnessed in more than modern song and dance. A definite shift in beliefs, attitudes and numerous practices, including the whole style of life, was and is pervasive among the majority of students that enroll in colleges across the land. In that way, the entering students of 1973, although coming from the same or similar family backgrounds was different than those of ten and twelve years before. Changes of this nature are beyond the control of admissions officers of the great majority of colleges and universities.

Academic ability: The average (mean) scores on the Scholastic Aptitude test for the two classes are shown below:

SAT scores	1973 Class	1974 Class
Verbal:		
Mean	575	574
S.D.	86	79
Math:		
Mean	598	595
S.D.	84	82

The average scores on both tests were within the small range of mean scores for the entering classes of the previous ten years, starting in 1963. For example, the verbal mean for the 1973 entrants is near the bottom of the ten-year range and the Math mean is approximately at the middle. In essence, the recruitment and selection process has resulted in the admission of 12 entering classes, one after the other, which do not differ significantly from the means of the twelve-year range of scores--which is 583 for the Verbal Test and 599 for the Math Test.

The standard deviations (S.D.), a measure of the spread of individual student scores around the respective means, are also very consistent over the years. Thus, a hypothetical average student is a person of very much the same ability over the years, but the average male has a somewhat higher combined SAT score (Verbal & Math) than the average female.

The two mean scores for the Colorado College students are approximately one S.D.above the national means, which denotes that there is a significant degree of selectivity taking place. The admitted students represent an atypical sampling of the youth that enroll in four-year colleges across the nation. This selection results in large part from the admissions decisions, but the fact that the Colorado SAT means are neither higher nor lower is a reflection of a persistent public image of the institution, which apparently was not altered in the first five years under the Colorado College Plan.

Of greater significance, where the education of the students is concerned, is the distribution of student ability around the Verbal and Math mean scores. Over ninety-five percent of the entrants fall within two S.D.'s above and below the Colorado mean. Relatively few students fall below a score of 400 on either test, and only an occasional student has a score below 300 on one of the subtests. Nevertheless, the distribution over four S.D.'s represents a significant "expanse" of ability, and the challenge of adequately instructing students, often in the same class, who score below 400 and above 700 has been present in all Colorado College classes over the past two decades, previous to the initiation of the new calendar and thereafter.

Some attention was given, in the transitional period of the early seventies, to the challenge and difficulty that an intensified learning scheme, vis-a-vis the short-block calendar, might pose for students of varying abilities. The policy and practice to date is seemingly based on the premise that level of ability is not a contingency of effective learning under the new system. But a more determining factor regarding student constituency may be an expressed, institutional commitment to the education of a variety of youth, especially from a cross-section of the citizenry from the immediate state.

Intellectual Orientation: Earlier in the chapter, the implication was made that attitudes, beliefs, and the degree of liberalism versus conservatism are all related to a students' involvement in learning. During the years between 1930 and 1960, thousands of studies were conducted on college students in which the associations between grades and ability, motivation, attitudes and personality characteristics were examined.[6] During the fifties and sixties, numerous researchers concentrated on the relationships between achievements and persistence in learning and the personality characteristics of the students, which led to further developments in the assessment of learning dispositions and cognitive styles.

An assessment instrument, the Omnibus Personality Inventory,[7] which is a means of testing such characteristics and dimensions, was administered to large samples of the Colorado College students at the time they entered college and again near the end of the fourth year. The results of such testing provided considerably more differentiations among the students in the two classes than the results of aptitude testing (SAT). The inventory is composed of fourteen scales, and six of these contribute to the assessment of a validated concept called intellectual disposition. The degree of a student's disposition is estimated or determined by his scores on the six scales; both the level of the scores and the patterns among them lead to placing a person at one of eight levels or categories. Very briefly, intellectual disposition (IDC) encompasses interests in intellectual and esthetic matters, reflective thought, dealing with abstractions and concepts, logical thinking and problem solving. The eight categories range from persons who possess a number or many of these attributes to persons who have few or none of such interests.

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[6]Fishman, J. A., "Non-intellective Factors as Predictors, as Criteria, and Contingencies in Selection and Guidance of College Students," In Selection and Educational Differentiation, Berkeley: Center for the Study of Higher Education, 1959.

[7]Paul Heist and George Yorge, The Omnibus Personality Inventory, New York: The Psychological Corporation, 1968.

The results for the entering students of 1974 are shown below, along with the IDC distribution of students on three other campuses, selected as reference groups to provide some context for considering the Colorado students. A very brief definition is given for each of the eight categories; the two definitions at the top and bottom extremes serve to give the reader a ready insight to the overall "dimension." The Colorado results show the distribution for each sex, while results for the University at Berkeley (UCB) and the two selective, liberal arts colleges (X and Y) are for the two sexes combined.

It is apparent that the four institutions all draw and admit students with quite varied dispositions to learning, illustrating an old finding that we seem to have more diversity within a great many institutions than we have among them. As observed when reviewing some previous data, the results for Colorado College and the University at Berkeley are again very similar, with small percentages falling at the two extremes and at least a third in each freshmen class falling in category five. The latter clustering, along with the students in the two adjoining categories, portray the fact that both campuses have a preponderance of students who appear to be more inclined toward an education preparing them for future careers and occupations than they are to sampling the riches of the liberal arts. The same observation would be a little less true of the incoming students at College X, which comes closest to having a fairly normal distribution. College Y presents the most skewed distribution, with almost sixty percent in the top three categories, twice the proportion found in College X.

In review, we find rather diverse learning orientations in four selective institutions, but in comparison to the hundreds of non-selective institutions of higher education, where the distributions are skewed with high proportions in the bottom three of four categories, the possibilities for a more general or complete education appear to be much more favorable for larger numbers in the four institutions under consideration. The Colorado College distribution, with approximately eighteen and twenty-five percent falling in the top three and bottom three categories respectively, should not have been overlooked by a committed faculty which

Academic Aptitude And Intellectual Orientation (continued)

Categories (Degree of Intellectual Disposition)	Institutions (Results are in percentages) UCB	Colorado College Female	Male	X	Y
1. Broad, intrinsic intellectual interests, with strong literary and esthetic perspectives.	2	0.5	0	4	6
2. Intrinsic cognitive interests oriented toward dealing with abstractions and concepts.	5	3	6	11	28
3. Academic interests and concerns but emphasizing problem-solving and logical thinking.	15	15	14	15	25
4. Academic interests, tempered by an achievement orientation and a disciplinary focus.	22	21	23	22	19
5. Interests in academic matters and achievement, but chiefly as a means to an end.	33	35	36	24	14
6. Attenuated learning orientation, with practical emphases.	16	23	16	19	8
7. Nonintellectual, with minimal interests in ideas or aesthetic literary matters.	5	2.5	4	3	0
8. Anti-intellectual, but interested in tangibles and learning the "practical."	2	0	1	2	0

desired to be communicative and effective with all students in a class. Whatever the challenge to the various professors, it would not have come chiefly from a relatively small number of exceptionally bright and intellectually oriented students but from

the diversity of academically committed and noncommited students at the extremes of the IDC distribution. From the beginning of the Colorado College Plan, one real challenge to the faculty and the maintenance of the Plan was this diversity of the student body, as determined by both the range of ability and the variation of interests in and dispositions toward learning.

Summary

The sum and substance of the review of the entering students presumably highlighted important aspects of the Colorado student "input" a few years after the beginning of the Colorado College Plan. In essence, the underlying theme was the general selectivity of this student body, in that large proportions exhibited the characteristics of students in other institutions recognized as places of "high selectivity." Significantly large proportions, many coming from outlying geographical areas, were above average in academic aptitude (eighty percent being above the national normative scores on the SAT), chose the College for sound academic reasons (their first or second choice), manifested liberal inclinations in their political stance and religious beliefs, knew what they wanted in an "ideal" college and had concomitant expectations of the college they selected, and sought stimulating and challenging educational experiences. But the resulting composite of the student body could not be described as homogenous, any more than it could be described as a special group which had been selected to study under the advantages of a fast-paced intensive program.

Over two decades ago the higher education system in the United States was severely challenged by the findings and interpretations in a small book entitled Changing Values in College.[1] This report, prepared by Philip Jacob, resulted in reverberations and considerable dismay throughout much of higher education. The information for this disturbing publication was drawn from all studies conducted up to that time on college students, regarding the possible influences of a college education on their values and attitudes. Major attention was given to the role of the social sciences in the context of liberal arts education, but the studies and the results reviewed led to rather broad findings and general implications.

A few quotations from the Jacob report will convey some of the tenor and import of his overall presentation, although references to him with such brevity is an injustice to the complexity of his findings:

> The main overall effect of higher education upon student values is to bring about general acceptance of a body of standards and attitudes characteristic of college-bred men and women in the American community.
>
> There is more homogeneity and greater consistency among students at the end of their four years than when they began. Fewer seniors espouse beliefs which deviate from the going standards than do freshmen. The student has ironed out serious conflicts of values or at least achieved a workable compromise ... Changes are rarely drastic or sudden, and they seem to emerge on the periphery of the student's character, affecting his application of values, rather than the core of values themselves.

[1] Jacob, Philip E., Changing Values in College, New Haven, Connecticut: The Edward W. Hazen Foundation, 1956.

To call this process a liberalization of student values is a misnomer. The impact of the college experience is rather to socialize the individual, to refine, polish, or "shape up" his values so that he can fit comfortably into the ranks of American college alumni. . . .

This study has not discerned significant changes in student values which can be attributed directly either to the character of the curriculum or to the basic courses in social science which students take as part of their general education.

For the most part, the values and outlook of students do not vary greatly whether they have pursued a conventional liberal arts program, an integrated general education curriculum or one of the strictly professional-vocational options.

.....

Equally disturbing is evidence that the quality of teaching has relatively little effect upon the value-outcomes of general education--in the social sciences or in other fields--so far as the great mass of students is concerned . . . With important individual exceptions, instructors seem equally ineffective in tingling the nerve centers of student values.

.....

This study has discovered no specific curricular pattern of general education, no model syllabus, . . . no pedigree of instructor and no wizardry of instructional method which should be patented for its import on the values of students. Students' values do change to some extent in college. With some students, the change is substantial. But the impetus to change does not come primarily from the formal educational process. Potency to affect

> student values is found in the distinctive climate of a few institutions, the individual and personal magnetism of a sensitive teacher with strong value-commitments of his own, or value-laden personal experiences of students imaginatively integrated with their intellectual development.

Jacob's conclusions, only partially addressed in the above excerpts, were a source of consternation and concern for a great many educators and faculty members in innumerable institutions. They served as a challenge on many fronts to reexamine the educational process at the undergraduate level, and they served as a major provocation for further and more intensive investigations of the influences and affects of a college education, in the years immediately following and up through the mid-seventies. Several major studies and extended reviews provided considerable additional information about students' experiences and the variety of effects resulting from two or more years in academic environment. Two of such publications, both representing comprehensive analyses of almost all studies completed at the time, places the effects of college-going in a more kindly light. These were the publications by Feldman and Newcomb[2] and Bowen.[3]

Both of these extended reviews revealed that, based on a great variety of research, significant differences had been obtained on numerous variables such as values, attitudes, and personality characteristics. In essence, these authors were convinced that the differences for groups of students, assessed at the time of college entrance and near the end of their college years, did illustrate that the majority of students on numerous campuses had progressed in their thinking, changed in certain attitudes, and often subscribed to new or different values. They also showed that such results were not identical or similar from college to college and

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[2]Feldman, Kenneth A., and Newcomb, Theodore M., The Impact of College on Students, San Francisco: Jossey-Bass, 1969.

[3]Bowen, Howard R., Investment in Learning, San Francisco: Jossey-Bass, 1977.

that the number and extent of changes frequently varies among institutions and among groups majoring in different subject fields. They acknowledged that one source of variation appeared to be related to the concentration of types of students (differing in ability, motivation and commitment) who enrolled in certain institutions and not in others. They also shared their awareness that their selected results provided a basis for concluding that many or a majority of students had changed in certain positive ways. For example, many students evidently had become more intellectual, more liberal, more tolerant, more autonomous, and so forth. However, the results did not reveal what had happened to individuals or how specific persons had changed, whether mostly positive or negative, on a composite of attitudes or personality characteristics.

In brief summary, the results of a college education, or of a sampling of learning experiences in the liberal arts, were examined and interpreted somewhat more broadly in the more recent examinations by Feldman and Newcomb and Bowen. Their analyses did succeed in presenting the investment in post-secondary education as a more profitable venture than had been the conclusions arrived at by Jacob. But, the former authors had a much wealthier collection of comprehensive studies upon which to base their findings.

With these introductory comments in mind, a brief review will be made of a selection of data drawn from the Colorado College students. The results from just one class (1974) will be used again in the first selection, resorting to information obtained from a questionnaire that was administered at the beginning of the freshman year and near the end of the senior year. The particular questionnaire items have been selected to represent different kinds of information and change as well as different degrees of change. In the second section, results obtained through the use of an objective test, a personality inventory, will illustrate another means to assess change over time. The former, comparing percentage of response of the same group of students (N=235), answering the same questionnaire item at two different times, is typical of the largest proportion of data analysis used in the studies of the previous twenty years. The second form of analysis has been used not at all in comparison of large groups.

Comparison Of Objectives, Beliefs, And Preferences

The topic of objectives is most thoroughly addressed at the time of entrance to college, but a few questions employed are on matters of continuing concern or are of interest when a student, as a senior, responds retrospectively and reflectively, for example, a continuing concernabout college students in their long-range educational aspirations.[4] The proportions indicating whether they want a M.A., an academic doctorate (Ph.D.) or an advance professional degree changed significantly between the freshman and senior year, with the latter remaining approximately the same and those seeking a M.A. and a Ph.D. increasing (thirteen and five percentile points respectively). Of somewhat more interest is the proportion (23%) who still maintain that they have no idea about an eventual degree. This figure, however, was thirty-three percent when they first enrolled.

Regarding the subject field of concentration, large numbers of college students on most campuses have been known to make a change two or three times. This class, and the 1973 entrants, gave a more stable picture. Between eighty-five and ninety-five percent of those that initially designated the major areas of humanities, the physical sciences, the biological sciences and the social sciences ended up with specific majors in those areas. The latter, the social sciences, is the only one of the areas with an increase--from twenty to twenty-five percent of the total class. Three major areas had significant increases in the proportions of the class changing to take a degree in these spheres--economics and business administration (6% to 17%), fine arts (2% to 8%), and a duo-major (0% to 10%). There were other interesting shifts, from one specific discipline to another, within the larger major areas, not revealed in the gross figures mentioned above, several of which can be explained as specific or unique to this campus.

[4]The students surveyed both times, pre and post, consist of over 50 percent of the entering class that was available at the time of the senior assessment. Compared with the nonrespondents at the senior level, they are not different in aptitude (SAT) and on demographic variables.

The students were asked about their one most important objective for pursuing a college education at both the time of entry and when approaching graduation, probably not a simple query at either stage. A fourth of the freshman class, the largest proportion, designated the "development of a philosophy and style of life that are satisfying and personally fulfilling." Seventeen and fifteen percent of the seniors listed this same objective as their first or second choice respectively. The other largest proportions, or largest shifts, on four other out of nine listed objectives are as follows:

Fr.	Sr.	
8%	24%	Increase in self-discovery and insight into my own being--my abilities, needs and emotional make-up.
6%	20%	Explore new ideas--seek the excitement of learning and of developing broad intellectual interests.
16%	0%	Become involved in actions dealing with the educational, political, and/or social problem of society.
14%	5%	Learn to interact with and relate to different kinds of people.

Needless to say, most students, if not all, would have identified two or three objectives, but limiting them to one permitted the tapping of prominent preferences at the two stages in their young lives and the identification of changes. The shifts in both directions confirm a conclusion presented by Philip Jacob twenty years earlier--that the seniors tended to shift to a more self-centered, self-satisfying orientation, in contrast to an altruistic and other-oriented stance.[5] In the students' favor, the two changes from lower to higher are certainly in line with listed objectives of liberal arts colleges, and not to be deplored. The

[5] Op. cit., Jacob, 1956.

students also were asked to designate their second most important objective, and these results were very much in line with the shifts shown for the most important, in other words, a second large proportion tended to support the "highest" objectives (of the most important choices) designated by others.

The area of political interest is another area frequently considered when researchers are examining student changes, especially since the liberalization of student thinking has received persistent attention since Newcomb[6] first reported on the effects of education at Bennington College.

The responses shown below result from asking the students, first, to indicate "with which political group are you affiliated or generally most sympathetic?" and, second, "how would you describe yourself from the standpoint of political attitudes?" The results are in percentages.

Fr.	Sr.		Fr.	Sr.	
20	29	Republican	3	3	Radical or far left
29	28	Democrat	39	35	Liberal
31	25	Independent	30	28	Moderate or middle-of-the-road
1	3	Other	11	19	Conservative
15	13	None	1	0	Very conservative
3	2	No answer	0	1	Anarchist
			7	6	Nonpolitical
			8	6	Uncertain
			1	2	No answer

[6]Newcomb, Theodore M., Personality and Social Change, New York: Dryden, 1943.

The chief result across these figures is the similarity between the first and fourth year. The one observable shift, fairly minimal when considering the total distribution, is to a Republican preference and conservatism in political attitude. The figures within these two sets of distributions, comparing the students as freshmen and seniors, are not significantly different. However, there is not any indication of a continuing shift toward a more liberal or moderate position, as observed in the pre-college shift from the parents' commitments. These results are also in line with a Jacob conclusion; a best prediction of these seniors' political predictions appears to be their preferences at entrance to college.

In reviewing the area of religious beliefs, in which college students are known to show changes, at least such was found to be the case in the sixties, the story between the four years is again one of more stability than change. As shown also in the previous chapter, a shift from the family religion for a significantly large proportion, mostly witnessed in the changes of Protestant youth, has taken place by the time of college entrance. Some of the students in this 1974-1978 sample, as true of the 1973 freshmen, had already professed a move away from the parental faith or affiliation, and exhibited small additional change to "no religious beliefs," as shown below. One might safely conclude that the indicated change by seven percent is more a maturational or developmental phenomenon than it is an effect of college experiences, especially since such a development was already in process four years earlier. The shift of a small proportion in the political sphere who moved away from a more liberal commitment during college is not duplicated in the area of religion.

Fr.	Sr.	
9	7	A combination of religious beliefs.
31	26	No formal religious beliefs.
6	13	No religious beliefs.

In the area of preferences, the students were asked to consider which of a number of features would be important to them if they were given the opportunity to choose an ideal college. The results

presented below reveal which features or aspects of a college received almost identical or very similar responses over the four-year period and the only two features on which they shifted significantly (at the .01 level). Consistency in the students' thinking appears to be the major story, a fact that is especially revelant in view of their involvement in an institution with an unusual calendar. All the features were not included in the 1978 questionnaire, but since proportions for the two classes were very similar on the items in common on both questionnaires, several sets of items (features) are included for the 1973-1974 students. These items, the first three, are identified by an asterisk. The figures are in percentages, but they do not always total to 100 percent because of no responses.

Fr.	Sr.	Features
*93	89	Emphasis on a broad liberal arts education.
7	10	Emphasis on a highly specialized education.
* 5	11	Mostly lecture classes.
95	89	Mostly group discussion classes or seminars.
*10	11	Classes with little emphasis on independent study.
90	89	Classes with much emphasis on independent study.
85	84	Highly selective enrollment policy.
15	16	Open enrollment policy.
20	67	Highly intensive academic program.
28	31	Academic program of average difficulty.
48	45	Students quite involved in off-campus politics.
49	53	Students mainly concerned with campus activities.
62	72	Intercollegiate athletics not emphasized.
37	28	"Bigtime" intercollegiate athletics emphasized.
31	16	Much competitiveness for grades and recognition.
67	82	Little competitiveness for grades and recognition.

The responses (proportions) for men and women were very much in agreement on all but three items. It is of interest that approximately ten percent more men, at the senior stage, opted for a de-emphasis of intercollegiate athletics and for a highly intensive academic program, while ten percent more senior women were in favor of little competitiveness for grades and recognition. Overall, it is significant that four years of experience in the intensified academic regimen of the three and one-half week block modules did not alter or modify the students' preferences for the features most directly related to the teaching-learning process and their expectations of what an ideal undergraduate program should be. It does not seem presumptous to surmise that their preferences and expectations were beyond the realization of some of the College's policies and the faculty's instructional practices.

Orientations And Attitudes Toward Education

The content of the questionnaire used in the four-year study of the two classes provided ample opportunity for the students to convey their orientations, attitudes, desires and expectations. The items or questions also permitted the students the means to convey dissatisfactions, disturbances and critical reactions, directly or indirectly. They also permitted them a means to show how they had changed in the way of rejecting one idea or attitude for another. But, as already illustrated, the minority of students who had changed or were changing, either positively or negatively, were of course "overruled" by the thinking and responses of the majority within the groups of men and women. The majority tended to confirm or verify the merit or rationality of the orientations and attitudes they expressed on most educational concerns as incoming freshmen. In other words, the type of responses supported by the majority reflected positively on themselves at the freshmen and senior level, since as first-year students they already had committed interests, views, and objectives in the educational sphere.

A selection of a small number of items confirms the above conjecture and the respectable thinking of the students about some matters of relevant concern within the context of liberal arts colleges, again drawn from the student responses in the 1974-

1978 class. On these items the students were asked to designate one of four responses which most closely represented or reflected their attitude. The results given are the combined proportions (in percentages) for the students at the first-year and fourth-year level, who indicated that the key statement "reflects my attitude somewhat" or "reflects my attitude closely."

Fr.	Sr.	Statement
88	91	The primary purpose of college is to explore new ideas--to become involved in learning and to develop broad intellectual interests.
82	84	The most important thing about college is that it provides time to discover oneself and to think about what one wants to do with one's life.
82	81	An important part of my education will be (was) talking with other students about a variety of philosophical and intellectual concerns, many of which have (had) nothing to do with classes.
87	87	Students should have the privilege of participating in decisions regarding content and organization of courses.
86	78	Student participation in the wide variety of activities on campus is just as important as participation in activities designed specifically for intellectual growth or career preparation.

Except for the indication of a small difference on the last item (eight percentile points), a shift in favor of "intellectual growth and career preparation," a very high proportion of students indicated a consistent subscription to several important but different concerns about college education, most frequently experienced in residential institutions. The students expressed their awareness of the value of the several experiences (implied in

the statements) as they entered college, and their lives and learning at Colorado apparently had not altered their previous, positive orientations but probably lent credence to their importance.

In the areas of aspirations, objectives, attitudes, opinions, and ideals, there is rather minimal evidence of change. Large proportions of seniors who professed on the questionnaire strong support for certain ideals, orientations, attitudes, principles or activities, also gave similar responses on the same questionnaire as entering freshmen, at least as analyzed on a large group basis--all freshmen versus all seniors.

In the proportions reviewed above, the small shifts or changes, such as the move toward political conservatism, probably occurred gradually over four years. In addition, there were a few significant changes (statistically) that seem less directly related to learning pursuits or the purposes of a liberal arts education. For example, considerably fewer students (from twenty to thirty-five percent less) participated in certain extracurricular activities, than was the case during their high school years. This was true in the areas of student government, debate or dramatics, journalism and publications, religion, school spirit activities, music (participation and performance) and athletics and sports. The greatest "drop-off" in both classes was in their involvement in musical activities (orchestra, band, chorus) and the least in athletics or sports participation. This lesser participation in the extracurricular realm, however, is known to be fairly typical of college students on many campuses.

Among other significant changes, larger proportions of seniors, as compared to freshmen, were in support of the women's liberation movement; believed that "the most important part of college life existed outside the classroom and the library"; believed that religious affiliations and involvement in such organizations were not that important; and felt or believed that "the use of marijuana should be legalized." Significantly smaller proportions of seniors, compared again to their freshmen responses, subscribed to the following statements:

- I value self-expression and expansion of my personal experience more than the intellectual grasp of concepts and principles.

- The main purpose of education is to prepare people for rewarding careers.

- An important part of my college experience was my association with faculty members and discussing with them topics which may not have been related to course work.

- Students should become meaningfully involved in attempting to correct the injustices of our society.

- The federal system of checks and balances is working as effectively as it should.

In brief, iterative summary, at this point, the questionnaire survey results provide considerable insight into the orientations and thinking of the Colorado College students that enrolled in the mid-seventies, a few years beyond the inception of the Colorado College Plan. In numerous respects, the data resorted to so far in this chapter seemingly serve as much as a supplement to the description of the entering students (Chapter III) as they do an assessment of change of student characteristics and behavior. One may ask if the kind of findings and type of data that led Philip Jacob to his conclusions over twenty years ago are also found here. As already inferred, the findings for the seniors, at least the largest proportion on a majority of questions and concerns, appeared highly predictable from the findings on the students who initially enrolled. The significant changes that were noted could be explained, for the most part, without resorting to the presumed influences of four years of college courses. But, any conclusions about limited or minimal changes in the thinking, reasoning and behavior of the Colorado students would be an inadequate and unwarranted interpretation--without additional information.

Underlying problems to change assessment, which cannot be pursued and reviewed here, have their bases in several sources: (1) a selective student body (good home and family background,

high aptitude, generally high motivation, successful academic achievement records, maturity, delineated aspirations and objectives, and high ideals and great expectations); (2) too few questions in the questionnaires about topics of controversy and greater breadth of concern; (3) the general stability of human personality; and (4) the limitations inherent in the assessment of change on a mass (group) basis. The major problem centers in the fourth and last reason or source. Group data, by definition, encompass a variety of information, such as a collection of individual scores falling above and below a resulting mid-score, with the latter being more of a statistical artifact than a representative measure of true change. On the other hand, percentages and proportions, drawn from the frequency of responses of a group, are generally limited by the use of a very few response categories (from one to five), that is, a very limited range of "measurement." This fact, together with the incapacity of frequency data to assess the degree or amount of change severely limits all pre-post assessment analysis.

Change In Intellectual Orientation And Social-Emotional Adjustment

The general pre-post assessment of the students who entered as freshmen in 1973 and 1974 included a personality inventory, an instrument which was especially constructed and validated to assess a number of psychological characteristics that a group of authorities agreed were important aspects of student thinking and behavior in an academic context. This instrument, introduced in Chapter III and titled the Omnibus Personality Inventory, was developed and refined over a twelve year period and has been used in a large number of studies of college and university students since the early sixties. The Inventory (OPI) includes fourteen scales; the definitions for each scale are found in Appendix F.

The OPI scales fall into three groups, the first group including four scales assessing intellectual orientation, the second including two scales assessing an openness in thinking and readiness for learning, and the third including five scales assessing social-emotional adjustment. The first two groups, six scales, represent a validated means of assessing a student's intellectual disposition --a general orientation to being involved in academic activities and pursuits, or the lack of the same. This means of differentiating among students permits the placement of each individual in

one of eight intellectual disposition categories, that is, at one of eight different levels. (This concept was briefly introduced in Chapter III as the final means of describing the Colorado College freshmen.)

This system of categorization is resorted to here as a more discerning approach to analyzing change in the students' thinking and learning orientations since such change may be addressed on an individual basis, in contrast to group (all freshmen versus all seniors) comparisons. For the large proportions of students who completed the OPI at both the first and fourth-year stages, we have two intellectual disposition indices, that is, category placements at the beginning and near the end of their college careers. The construction and validation of this means of assessment provided for establishing category III, for example, had an average level of scores (across the six scales) and a pattern of scores that was significantly different from students in category II and IV. Thus, if a student in category III changed significantly, or at least responded significantly different the second time, he would either move up or down one or more categories.

The "story" for the students in the 1974-1978 class, who completed the test on both occasions, is presented in the data to follow, with their initial freshemn distribution across the categories shown in the column to the left. A review of the results for the seniors quickly reveals that the majority, across the categories, did not remain in the same categories, as much of the consistency of the results presented earlier in this chapter might lead one to predict. Except for the second and seventh categories, each with very small numbers of students, less than fifty percent remained in the same category, as when they were freshmen. The largest proportion of those who changed, across all categories, moved up one or more categories--as indicated by the total of forty-one percent in the bottom row, and sixteen percent of the initial total moved down one category or more. Of those that moved to a higher level of intellectual orientation, thirty percent moved up two or three categories, indicative of a rather serious change in a student's concern about learning.

Charge In Intellectual Orientation And Social-Emotional Adjustment
(continued)

Categories	Freshman Results	Remained the same	Moved Up (1 or more)	Moved Down (1 or more)
I	0%			
II	3	60%	0%	40%
III	13	41	18	41
IV	19	43	33	24
V	33	48	42	10
VI	26	38	53	12
VII	5	50	38	9
VIII	1	0	100	0
Results for total group		43	41	16

What these results reveal is a variety of personal reorientations, most of the changers moving up but quite a number moving down after four years of college. Those who stayed at the same level, at least at category V and above, have not lost nor negated their previous academic interests and commitments, and their "stability" to date may be basic to positive changes, now or in the future, in other areas. The breadth and prevalence of this disposition, represented in the pattern of scores on six scales tends to be effective across much of a person's behavior. In brief review, when analyzing the possibility of change on an individual basis, the assessment of the same person at two points in time, on a meaningful concept very relevant to academic involvement, a goodly portion of the students showed a significant positive change Also, the largest proportion of those initially in categories II thru IV, as well as category V, maintained their positions within the same categories; thus, persons in the top half of the IDC distribution as freshmen did not lose their strong intellectual disposition.

An additional address to personality change in general also was facilitated by means of the Omnibus Personality Inventory. Since students tend to change differently on the number and type of personality characteristics, a means had been developed to assess different types and amounts of change on twelve out of fourteen scales in the Inventory. (At the time of the original construction and validation of the scales, a second major concern was the development of scales that were sensitive to change per se. Besides measuring specific academic concepts validly, the scale needed to tap any changes in a student's thinking in the conceptual sphere.)

Amounts and levels of change were agreed upon by several authorities in order to determine a number of significantly different amounts, ranging from no change to major change (a pattern of changes across a number of scales). This system of analysis, arriving at half a dozen change categories, had its basis in the amount and pattern of changes most frequently observed, which was labeled "average change." The criteria for this "average change" were significant positive changes on at least five scales, supported by a pattern of change on either the intellectual disposition scales or the social-emotional adjustment scales. A higher level of change, labeled "major change," was based on seven or more positive changes or six positive changes with a full pattern of changes on intellectual disposition or social-emotional adjustment. A "negative change" category was based on negative changes on three or more scales, along with no positive changes.

The results of this form of analysis are presented below for both the 1977 and 1978 classes. The advantage of an analysis of this nature, just as in the previous one, is that is is done intra-individually. The pre and post-test scale scores are read and compared for each individual, and the level and pattern of change is placed in a category with all other individual comparisons of the same type.

Change In Intellectual Orientation And Social-Emotional Adjustment (continued)

Level of Change Categories	Total in Category (%'s) 1977		1978	
Major change	19		14	
Average change	25	57	23	56
Minor change	13		19	
Mixed change	25		22	
Negative change	9		12	
No change	9		10	

The results in the top three categories refer to positive changes, in the direction of greater intellectual concerns, more aesthetic interests, more tolerance of ambiguities, more autonomy, better social adjustment, more acceptance of self, and so on. Over fifty percent in both classes have made significant changes, with the largest proportions (25% and 23%) falling into the "average" category. On the other hand, this more complete analysis of change, as compared to the previous one focused only on intellectual disposition, results in very small numbers showing no change. Combining the bottom two categories and viewing them both as representing "no change" students, one still ends up with a relatively small minority of the classes indicating that they were minimally influenced during the college years. The percentages in the "no change" category alone are the smallest ever found, as compared to numerous other institutions where this form of analysis has been used.

The mixed change category is composed of students, for the most part, who had positive shifts in their scores on three or more scales but also had two or more significant negative shifts. A majority in this category have to be seen as having made sound positive changes, often, for example, on the scales assessing intellectual orientation, but with negative shifts on the social-emotional scales.

Summary

In this extensive chapter, attention has been focused on the possible influences of the college years on a great many aspects of students' thinking and behavior. The largest proportion of the findings tend to subtantiate the results of earlier studies, which indicate that students' values, attitudes and opinions do not change much as a result of their undergraduate experiences. It was shown, however, that a large proportion of Colorado College students placed high value on education at entrance and exhibited great expectations and strong commitments, which they maintained during their years at the College. Some changes drawn from the questionnaire data were identified, but such findings on the groups of students gave little basis for a story on change.

A second look at change was permitted through the results obtained on a personality inventory composed of scales particularly relevant to the academic sphere. The derived results revealed that significant proportions of students had changed, often in ways deemed desirable by most colleges.

V. SELF-PERCEIVED STUDENT CHANGES

The assessment or appraisal of change that may or does take place in students at any educational level has posed a challenge for many researchers. All approaches are somewhat limited as far as getting at the totality of any single individual's changes and development over a period of time. The ideal approach is to assess change objectively but subtly, without involving the subjective responses of the individual being assessed or observed. In fact, observations at different points of time, a method which has been made quite objective through use of photography, is a process with much in its favor. Observations with interviewing at different stages has been used in a number of student studies, in some cases supplemented by psychological tests and questionnaires. The best approach is one of multiple means of assessment, including intermittent interviewing and testing, conducted over an extended period of time--two, four, or more years.

The problems of cost and time are most often prohibitive where research is being conducted on all the students in one or more colleges, especially if the assessment goes beyond that of using questionnaires, inventories and tests. The latter means are more expeditive and most frequently used, but some of the problems of the "paper and pencil" approach were made evident in the presentation of results in the last chapter. However, numerous researchers argue for the merit and objectivity of merely having students respond to questions and statements in either questionnaires or inventories used at two or more stages, and then inferring change from the differences between obtained percentages or mean scores. (To facilitate the computing of the significance of the differences, the data must be collected and analyzed on a group basis.)

In the study at hand, both interviewing and the administration of questionnaires were employed in asking the students to indicate how they had progressed and changed during the college years. An underlying assumption to this approach is that students have (or should have) a certain amount of knowledge about themselves and some understanding about what has happened to them, and possibly how or why it happened. Such an assumption relates to another, and that is that they have a fairly accurate recollection, and/or understanding, of their thinking, attitudes or skills at some previous time. The latter is not necessarily the case and accuracy, in part, depends on the particular question and the intervening period of time.

The students in both classes involved in the study were approached in varying ways, but mostly through interviewing and questionnaires, and asked to relate what was happening to them or had happened.

For the purpose of getting some understanding of how the students saw themselves as changed individuals, two questions are used from the senior questionnaire, and the responses from one of the two classes serve the purposes of this presentation. The first question was directed to the students' learning and the progress that they had made in gaining understanding and academic skills. The lead question and the response categories and results are presented below.

A number of statements listed below are related to educational objectives. Indicate whether you feel that you have progressed in these abilities or skills, compared to when you began college. Check one of the three responses to show the degree of progress.

Responses (in percentages)

	Very little or no progress	Some progress	Much progress
Knowledge of specifics in major field, such as terminology or trends	0	12	83
Ability to comprehend, interpret, or to extrapolate	1	32	66
Ability to apply abstractions or principles in particular situations	3	44	52
Understanding of the scientific method	23	41	35

The results represent estimates or approximations, of course, on the part of the students, but the progression of increasing differences in the use of responses across the four items seems logical and related to the presumed difficulty of each. The large

number indicating "much progress" in the gaining of knowledge in their particular fields is probably in line with what happens in most colleges; progress probably is being associated in the student's thinking with an increase of knowing and remembering. Whether their learning of specifics and terms is equivalent to functional knowledge is not the point, since they were asked whether they felt they had progressed. And learning specifics, facts and terms is an essential, though rudimentary, operation, but this is most likely what the majority of students accomplish through most of their studying and learning.

Of the other three, "comprehending and interpreting" and "the application of abstracts and principles" follow in order, both in the way of learning such skills and actually making use of them. The students are indicating, for the most part, that they have made "much progress" or "some progress." That may be a little optimistic, allowing for what happens on most campuses, but it is reassuring to discover that these students feel or believe they are progressing. If it actually happened for the proportions that claimed much progress, it is a positive reflection on the college and instructors, as well as the students. Many of the latter were recognized achievers when they entered college and almost fifty percent have scores at the eighty-five percentile (based on national norms) or above on the SAT. They certainly have the ability to maneuver in the field of abstractions.

The fourth item, understanding the scientific method, is probably significantly lower because the largest proportions of students in these classes did not major in the natural sciences and resorted to a minimal amount of course work in those disciplines. In the smattering of science taken by some students merely to complete a requirement, the scientific method, as such , is not likely to receive particular attention.

Giving a second thought to the results just reviewed, the major finding probably to be drawn from distributions of the student responses is that seventy-five to one hundred percent felt that they had made some to much progress on all four types of learning or uses of the same.

The second questionnaire item of relevance here was an open-ended question, which read as follows:

> Recent research reports show that students change in different ways and varying degrees during the college years. Some report changes in their interests and attitudes, some in their commitments, and some report personality changes. Looking back over your own college career, what have been the most important changes for you?

Of the total group of seniors who completed the questionnaire, eighty-four percent responded to the question. Most of them listed or wrote about several important changes, and an amazing number (34%) completely filled in the ten lines provided and not infrequently continued to write on the back side of the questionnaire.

The responses were read by an employed social scientist who identified the "most important change" in each case and categorized it according to type of change. Several dozen of the student statements were selected and transcribed by the same person to convey to others the variety of ways that senior students had seen themselves making important changes.

The types or areas of categorized "most important changes" are listed in order of the proportions of seniors who identified the changes. The six areas of change, listed or described are in line with expectations, as well may be the case for the top two types of changes.

Category	Percentage of seniors
Intellectual	25
Psychological (self-image, self-acceptance)	24
Political	10
Social	10
Religious	10
Career	5
No answer (other)	16

The first category, intellectual, is in keeping with the context of a liberal arts college, but it seems unlikely that intellectual changes would be mentioned most frequently on a great many college campuses. It presumably is reflective of the number of students with such concerns at a time they were approaching graduation, but also reflects on the satisfaction that hinges on intellectual pursuits and on the faculty that encourage and facilitate positive changes in academic activity.

The second most important change area, psychological, seems particularly significant on a campus where the pace and intensity of academic life presumably had been increased significantly. There could be a variety of contributors to positive psychological shifts, such as satisfactory academic pursuits, good faculty-student relations, good social relations, a balanced social-cultural context, and good recreational opportunities.

Over ninety-seven percent of the student comments and commentaries, at least as regards the most important changes, referred to a positive shift or development, such as gaining greater understanding of self and more confidence. Those who stated that the greatest change was in religion (10%), with few

exceptions, referred to becoming re-converted to Christianity, gaining a new conception of Christ's teachings, or being born again; but a small minority explained how their studies and gaining of understanding had confirmed their rejection of a former faith. Among the three percent that did not make positive statements, at least half of them referred to problems about themselves and personal adjustments. Less than five persons wrote about negative effects resulting from their studies or the Colorado College Plan.

To provide some understanding and feeling for the seniors' perspectives on important personal changes, every second statement from the small collection drawn from the total sample is presented below.

> I have a better centering into my own personal and academic interests, academically from a relatively detached, objective involvement in political science, psychology and economics to a more rigorous and disciplined involvement in history and most recently, philosophy. Personally, I think I've come to a more stable and energetic acceptance of myself.
>
> My changes have been subtle but mostly in three possibly related areas. Politically, I have moved from a liberal to an arch conservative position founded upon a strong commitment to the concept of "individualism." The liberal education here has opened my mind up to a wider perspective with varied types of intellectual interest. Also, though I feel more established in my identity now, I find myself questioning the establishment and things I do with a greater frequency.
>
> I view my most important changes as, first, the leaving of my family and the corresponding waning of some of the religious, economic and personal values held in my home. Then, through school and through outside reading and activities, the growth of a new set of values, goals, and beliefs. Also I have grown to appreciate art and music much more now

than when I enrolled at Colorado College.

I was extremely conservative, shy, studious, and naive as an entering freshman. I had never traveled nor done anything athletic nor dated, to speak of. I am much more confident and outgoing now. My political and social attitudes have changed about 180°. I've traveled quite a bit and experienced a large variety of things. I wish I had started my major sooner and had been involved more in campus activities and somewhat less in academics. Nevertheless, I've changed substantially, have made wonderful friends and am quite pleased with the whole affair.

Self-confidence and a greater ability to think imaginatively are probably the two greatest assets which I have gained since attending college. I am also, I think, a better writer, which is very important to me. And I have been introduced to a countless number of other interests which I will enjoy pursuing further.

The most important change is in my academic approach. I have become a much broader individual through the opportunities offered at Colorado College--to pursue intellectual and artistic interests independently. Also I feel more confident about expressing and integrating academic life to things in the outside world.

I have come to know myself very well--especially in terms of the goals I wish to achieve and the lifestyle I wish to live. This includes developing a personal philosophy concerning marriage, drugs, careers, friendship--almost everything involved in life. I've grown intellectually too, both in academic and personal terms. All of this adds up to my becoming fairly satisfied and happy with myself as an individual, yet anxious to continue to grow.

I believe I have become more aware of my own personal standards regarding the pursuit of knowledge. I have learned to take a closer look at which experiences are more valuable for me personally, and am no longer as willing to accept the dictum of faculty or administration with regard to what is "good" to learn. I am also much more aware of my capabilities other than in academic situations, i.e., in socializing and physical exercise.

A vast broadening of horizons--in relation to artistic, political, philosophical areas of intellectual study. My exposure to another culture in Europe was the most important learning experience to me, in the sense that I was not only exposed to toyally new surroundings but also exposed to my own independence of action and thought.

Realization of the limitations of the educational system followed by a recognition of the value of that system within those limitations. Politically, the realization of the finite characteristic of the world in which we live and its ramifications, especially in the areas of environment, wildlife preservation, natural areas preservation and, overall, the international system in a shrunken, limited world.

The growth in the variety of my personal encounters with people, an accurate re-evaluation of the uses of education, a growing disenchantment with traditional educational means and ends (especially grading systems) and a more deterministic attitude on social and world-concerning issues!

Intellectual growth has been a major event for me. I have begun to appreciate the cohesive nature of the pursuit of knowledge. Ethical issues related to advances in biological sciences are another important development. Understanding literature and its place in the world has also been a major change.

Writing well is also a new major concern.

I have learned to question things more often and not to believe that my professors necessarily know "the truth." I can respect and admire them but I don't have to integrate their ideas into my life. I am much more patient with a variety of people and standards. I have thought out more of my religious beliefs and have rejected much church doctrine.

Offhand, it appears that almost every aspect of my life has changed significantly in these past years. Primarily, I became interested in intellectual concerns and learning. I became more politically and socially concerned and involved; became interested in theatre and the arts, in educational theory and policy making, and solidified many attitudes which I had heretofore hardly reflected upon at all.

The most important changes for me have probably been realized outside the classroom. Interaction with other people (students, staff, faculty, administrators) has been extremely valuable in learning to deal with a diverse environment. Believe it or not, falling in love had one of the most profound effects on my outlook on life and knowledge of myself. The combination of these factors has led to a feeling that I better know myself and particularly my limitations. I feel that I have expanded my knowledge of what I can and cannot do--and particularly grasped a better knowledge of what I want for myself in intellectual and spiritual terms.

I've learned to love learning, and also, how to channel my energies so that I am better able to learn on my own. I've become convinced of the value of a liberal arts education in a culture which specializes too much. I've become more actively convinced of capabilities and intellectual potential and know that with a healthy attitude I can attain just about whatever I want intellectually or career-

wise. Emotionally there have been many upheavals, but my personal insight and will to live creatively and actively has increased. Politically, I am more cynical.

I have come to a fuller understanding of how to walk with my God, of living out my faith on a day-to-day basis. This is the foundation for the various other ways I have changed. I have found that I can become involved in the lives of others, that I can become vulnerable to them because I have a refuge in a personal, loving God. I have also become more concerned about and aware of events in the world around me. I have developed an interest in the political aspects of my world.

Attitude changes toward people in general have been the most profound changes in the past few years, toward a more objective, positive and tolerant attitude. I think that these changes are a direct result of experiencing contrasts between this campus and the rest of the world in terms of people and their attitudes, and it has brought a clearer understanding of many other aspects of life.

Personally, I have solidified my identity and ways of interacting with people to gain strength and confidence, and a desire and ability to deal directly with other people. I have increased my interests and abilities academically, and have definitely gained the ability to apply myself fully in many different situations to come up with solutions or interact appropriately. I've become much more aware and concerned politically and socially as well as environmentally, and am becoming more and more committed to social change. I have learned to set priorities and then work towards achieving them.

Political group with which faculty members affiliated or were most sympathetic (Percentages*)

	Year of Appointment			
Group	Pre63	63-67	68-72	73-77
Republican	22	24	15	6
Democrat	49	57	56	53
Independent	25	19	20	25

*The figures do not total to 100% with one exception, because of a small number who checked "other" or did not answer.

Political attitude most descriptive of faculty members' current stance (Percentages*)

	Year of Appointment			
Stance	Pre63	63-67	68-72	73-77
Radical/far left	3	0	12	9
Liberal	41	24	41	44
Moderate	41	52	29	16
Conservative	11	10	6	9
Other	4	10	12	16

*The figures do not total to 100% with two exceptions, because of a few who did not answer.

Interpretation of such data is somewhat limited by the changing definitions of the terms and categories, but the general distribution of the results may be used to contend that the position of a majority of the faculty is quite far removed from a conservative orientation. The total across the faculty that identify themselves as independent of a political affiliation is significantly larger than the identified republicans. At least seventy-four percent profess to be either democrats or independent of affiliation, a figure considerably larger than the average for liberal arts faculty in the country. Supplementing that figure with the overall forty-three percent across the faculty (not shown in the second table) who label themselves as liberal or far left in stance, and the minimal number who profess conservatism, along with the lessening proportions in more recent years subscribing to a moderate view, we have some basis for speaking of a significant majority who are liberal in the political sphere and quite likely liberal on other social-cultural topics and issues.

Some support for the latter conjecture is found in the results presented in the following table on religious affiliation or beliefs, but with the faculty here categorized by three major disciplinary areas. The figures for faculty who place themselves in the lowest three categories in the table connote at least a relaxed, if not a very "liberal" or agnostic, orientation. Here we find forty-seven, fifty and forty-eight percent in the three areas respectively acknowledging no religious beliefs or no formal religious belief, and small percentages denoting a combination of beliefs.

Categories most accurately describing faculty members' religious affiliation and/or beliefs (Percentages*)

Affiliation or beliefs	Disciplinary Category		
	Humanities	Nat. Sciences	Soc. Sciences
Protestant	25	18	33
Roman Catholic	9	10	3
Judaism	4	5	3
Eastern	2	0	0
Combination of beliefs	7	5	9
No formal beliefs	25	12	33
No religious beliefs	22	38	15

*The figures do not total to 100% because of the number who did not answer the question.

These results on religious affiliation approach the results obtained in former studies in which both denominational and nondenominational colleges were included.[1] The institutions of the latter type, which also ranked among those schools recognized for their academic excellence, tended to have a majority of faculty

[1]Clark, B. R., et al., Students and Colleges: Interaction and Change, Berkeley: Center for Research and Development in Higher Education, University of California, 1972.

members who identified themselves as religious liberals, agnostics, or atheists. The data for the Colorado College faculty in the three tables on political and religious affiliation, denoting a large proportion of professors of general liberal inclinations, represent a few indicators of the type of faculty members upon which institutions of excellence can be or have been developed. Granted, such generalizing may go beyond what is warranted from a rather limited amount of information, but these few facts lend some credence to an early hypothesis that the realization of the Block Plan demanded either unusual leadership or an unusually large proportion of capable, open-minded professors, or both.

From the amount of information available in the results of the last questionnaire completed by the faculty, three other items from a possibility of seven or eight have been selected to round out this introduction. The information presented in the next three tables deals with a major academic essential, namely reading and getting into the literature. But the data in all three tables refer chiefly to nonprofessional reading, a possible luxury for a faculty whose time and activity may be highly constrained by the Block Plan.

The first two tables, drawn from a question asking about book reading for pleasure, present the faculty responses analyzed by major divisions in the first table and by year of employment in the second. As would be expected, a somewhat larger proportion of persons in the humanities professes reading more books, although we find the largest disciplinary group which reads more than twenty-five books in the natural sciences. But it is noteworthy that across the total faculty approximately forty percent read more than fifteen books during the previous year, with the smallest proportion found in the social science, and sixty percent read ten or more books in one year for pleasure; this amount of leisure reading is seen as unusual, if not exceptional, for academic personnel, especially when viewed in the context of the professed demands for time for class preparation and instruction under the Block Plan.

The results found in the second table, structured by year of employment, reveal that there is a similar pattern of reading among faculty members of all ages. The differences shown among

Number of books, other than course books, read for own pleasure during the past year (Percentages)

No. of books	Humanities	Nat. Sciences	Soc. Sciences
None	0	5	6
1 - 2	4	4	3
3 - 9	21	40	36
10 - 14	25	12	24
15 - 24	30 → 50	13 → 38	12 → 30
25 or more	20	25	18
Total	100	99	99

Number of books, other than course books, read for own pleasure during the past year (Percentages)

No. of books	Pre63	63-67	68-72	73-77
None	8	0	3	3
1 - 2	3	0	3	6
3 - 9	21	33	47	28
10 - 14	22	24	18	22
15 - 24	16 → 46	24 → 43	12 → 29	28 → 40
25 or more	30	19	17	12
Total	100	100	100	99

115

those reading both ten and fifteen books or more give the edge to the veteran faculty members. The wide reading of a number of faculty members is general campus knowledge, but the fact that over fifty percent are very active readers speaks well of this college professoriate.

One finds additional, substantial evidence that this is a well-read faculty by reviewing the data on magazine reading in the table to follow. On this question, all were asked to "indicate the types of magazines you have been reading fairly consistently during the past year." Not all categories that were listed as possible responses in the questionnaire item are included in the table, but the results shown reveal the considerably higher concentration in several areas, including professional journals. The magazine types are ordered in the table according to amount of response across the total faculty.

Types of magazines read fairly consistently during the past year (Percentages)

	Disciplinary Category		
Type of magazine	Humanities	Nat. Sciences	Soc. Sciences
Professional journals	75	80	79
News & world affairs	66	63	80
Cultural & Scientific	55	83	61
Commentary, literary	69	30	68
Hobby & sport	20	23	36
Business	11	17	24
Religious or theology	12	7	3

A relative high proportion of all faculty members, averaging considerably above sixty percent, reported consistently reading publications in the top three categories, with over seventy-five percent in all three discipline areas reading professional journals. Also, relatively large numbers were indicating that they read in three or more areas, thus increasing the total amount of time given to reading. The differences in the figures among the three disciplines, and the highest proportion in each case in the second and third categories are in line with expectations, that is, coordinate with disciplinary emphases and concerns.

One might argue that the terms "fairly consistently," used in the question, do not permit more than an indirect inference about the actual amount of reading being done. However, the reported proportions are seen as inordinately high, supported in part by the contrast with the much lower numbers pursuing any reading in the bottom three categories.

In partial iteration, the results drawn from the two questions on the reading of books, magazines and journals seem to warrant a conclusion that a significantly large number (sixty percent and more) of the faculty give an impressive amount of time to reading. This appears as rather amazing since at least forty percent of the faculty in each major division report giving between three to four hours per day to preparation for classes. Thus, assuming the veracity of faculty reporting, both recently and in 1973 and 1974, when the reported time for preparation was much the same, one has considerable reason to speak of the overall quality of the academic men and women who staff a majority proportion of the college faculty.

Resorting to one more source of evidence, of a different nature, revealing time and effort given to the teaching-learning process, one finds additional support of constructive involvement and commitment. The data shown in the following table indicate the number participating in interdisciplinary courses. Over fifty percent across the three major divisions report such collaborative activity, and of that number, between eighteen percent (natural sciences) and thirty-seven percent (social sciences) indicate participation in team teaching two or more times in the past three years. Seventeen percent, found mostly in the humanities and the

social sciences, have been active in interdisciplinary courses three or more times during the three years. One would have to search far and wide to find one other liberal arts faculty with such a degree of instructional collaboration between two or more disciplines.

The potentiality for such cooperation across departments, obtained in the results of another question, give added validity to the spirit and commitments, to the flexibility and openness to exploration, of the Colorado College professors. Over seventy-five percent of the faculty members in each major division reported being highly favorable or moderately favorable to the idea of interdisciplinary courses taught by two or more persons. The majority of the others responded with a "no opinion." When the responses to this question were categorized by the year of employment, the professors from the pre-63 period and post-73, the oldest and the youngest, gave the lowest percentages of the four groups, but these two indicated their favorableness to the extent of seventy-five and seventy-two percent. All others of the post-73 group expressed "no opinion," rather than any opposition. Thus, whatever their disciplinary affiliation or general age level, a high majority are favorable to combined teaching endeavors and less than five percent, across the total faculty, indicated that they were not favorable. This profession of commitment to collaboration in the classroom is viewed as rather amazing, and it provides an appropriate capstone to this brief assessment of quality.

Participation of faculty members in teaching interdisciplinary courses in the past three years (Percentages)

	Disciplinary Categories		
Response	Humanities	Nat. Sciences	Soc. Sciences
Yes	54	45	64
No	46	55	36
Total	100	100	100

Faculty Teaching Practices

A selection of the information received from the faculty, both from the recent survey (1978) and the one conducted in 1974, has been examined to determine if the teaching behavior and practices are in line with the generally optimistic story about the quality of the faculty. The recent data are taken from a question in which all were asked to report about an average week across several blocks, between the beginning of the fifth block and the end of the eighth. The particular question was structured so that all were asked to indicate the time expenditure on a comparative basis, that is, approximate hours had to be estimated for each of six activities in comparison to time assignments among the five other activities.

The results shown in the table to follow represent estimates of time given to preparation for classes or labs, and the only comparable figures for 1974 also are included. In the latter case, the estimates of time were made to a single question (that is, not comparatively to other activities), which simply read, "how many hours per week did you spend in classwork preparation?" For both years the hours per week have been converted to approximate hours per day.

These two sets of estimates, although four years apart, are amazingly congruent, possibly intimating that the majority of faculty had adapted to an appropriate pattern of daily and weekly preparation after four years of experience, that is since 1970, and that they maintained it for the next four years. There is also more similarity than dissimilarity among the major divisions, with the exception that a significantly larger proportion (at the .05 level) in the natural sciences reported two hours or less preparation for the average day. But, only thirty-four and thirty-six of those in the other two major divisions reported their preparation time to be under two hours. (Since the faculty was not asked to identify themselves, one has no way of associating other information or variables with the amount of time given to preparation, or of discovering what the distinctions may be between those who can get by with fewer than two hours and those who resort to over two, three and four hours.)

Number of hours per day in an "average" week spent in preparation for classes or labs (Percentages)

Number of hours	Humanities 78	Humanities 74	Nat. Sciences 78	Nat. Sciences 74	Soc. Sciences 78	Soc. Sciences 74
	Disciplinary Categories					
Less than 1 hr/day	7	6	2	12	6	12
1-2 hrs/day	34	33	56	53	36	34
2-3 hrs/day	28	25	28	22	30	35
3-4 hrs/day	11	31	5	12	12	11
Over 4 hrs/day	11	5	9	0	9	8
No answer	9	0	0	0	6	0
Total	100	100	100	99	99	100

From an earlier study or two one has some evidence that many good or reputedly good instructors give considerable time to preparation for individual class sessions, but, admittedly, long hours could be found among both good and poor instructors. Here at Colorado College, with a faculty that has been described, in general, as having a number of characteristics often associated with high quality, we find the faculty members in all three major divisions rather broadly distributed across a range of hours for preparation. In the case of the humanities and the social sciences, however, the largest proportions (over 50%) were spending two or more hours at preparation in 1978-79.

It could be argued that for the experienced teachers, the majority having been here ten or more years, the investment of two or more hours in preparation represents a very respectable amount of time. And the reporting of two to three hours, or more, by others,

could possibly be in agreement with a general "complaint" by many that the demands on their time under the Block Plan were excessive. Conclusive inferences, however, are not possible, nor any conjectures about how the expenditure of time relates to the preceding information about quality.

These data regarding preparation for classes were analyzed several ways, and the resulting figures chiefly emphasize the variation among faculty and among disciplines. When the analytical categorization is made by year of employment, for example, over twice the number of the 1968-72 and 1973-74 persons, as compared to those employed in the earlier years, reported preparing two and one-half hours or more (the proportions are approximately fifty-six percent versus nineteen percent). Thus, more of the veteran faculty members indicated using less time. When the individual disciplines were the basis of categorization, the fact of variation across the faculty becomes the most apparent. This can be illustrated by the selection of nine disciplines (all had from six to thirteen members reporting).

Number of hours per day in an "average" week spent in preparation for classes or labs (Percentages)

No. of hours	Disciplines								
	Engl	Lang	Mus	Chem	Bio	Phys	Econ	Hist	PolSci
0-2 hrs	16	12	47	62	81	33	72	0	29
2-3 hrs	34	75	23	38	9	50	28	58	58
3 or more	50	0	8	0	9	17	0	42	14
No answer	0	12	22	0	0	0	0	0	0

The observed differences (shown above) among departmental groups may be accounted for in large part by the demands of the particular subject area, for example, the need for additional and supplementary reading of books and the reading of papers but the distributions within specific disciplines suggest that there also are other sources of variation, such as the motivation, needs and commitments of individuals.

The data presented on the amount of time given to the preparation for classes may best be left as descriptive information, chiefly pointing up that the professors vary considerably--from a small percentage (5%) reporting less than one hour per day to approximately ten percent reporting over four hours per day. But, those extremes show little more than the range of such involvement. The forty-eight percent (29%--2-3 hours; 9%--3-4 hours; 10%--over 4 hours) of the total 1978 faculty indicating that they average two hours or more in class preparation cannot be overlooked. This proportion constituting almost half the faculty may well include a larger proportion of the most industrious persons on campus, and it is likely to include a second large proportion of those persons who are recognized as excellent or very good instructors. Could such conjectures be verified, one might then conclude that the large proportion of forty-eight percent which gives the most time to preparation represents an additional indicator of general institutional quality.

A second teaching practice about which the faculty was questioned was the amount of time that they gave to "classroom instruction and supervision." The item or response was included among the six activities for which the faculty was asked to estimate the amount of time given in an "average" week. These data also have been converted from hours per week to hours per day, and the results for the three major divisions are shown in the following table, for both 1978 and 1974. In the latter year the question read, "How many hours per week did your class meet in Block 6?" This fact presumably would imply that the data for the two years is not directly comparable; however, except for the decided shift in the social sciences, the results appear quite comparable. Such comparability lends to the validity of the obtained results.

The most obvious finding is that a greater percentage in every case, and for both years, conducted classes for two to three hours per day, presumably for five days each week, and the next largest proportion conducted classes for one and one-half to two hours. The fact that totals of sixty-three to seventy-four percent in the three disciplines hold classes for two hours or more may be interpreted as a significant number across the total faculty who have committed themselves to the scheme of the Block Plan. The

twenty-five to thirty-three percent who indicate that they manage with less class time, that is, two hours or less, could be interpreted as defeating the potentiality of the Plan, but such variability in human behavior is difficult to control under the guise of academic freedom.

Number of hours per day in an "average" week spent in classroom instruction or supervision (Percentages)

	Disciplinary Categories					
No. of hours	Humanities		Nat. Sciences		Soc. Sciences	
	78	74	78	74	78	74
1-1½ hrs/day	5	9	9	6	0	24
1½-2 hrs/day	21	29	24	36	25	31
2-3 hrs/day	54	53	54	51	42	45
3-4 hrs/day	10	9	9	6	32	0
No answer	10	0	3	0	0	0
Total	100	100	99	99	99	100

Also, the number of faculty who hold classes for only four days per week, and for no more than two hours, is definitely not matching the class time available in a fifteen-week semester. Assuming at least fourteen weeks of actual classes in the semester system, one arrives at a total of forty-two hours for the typical three-unit course. The two-hour classes under the Block Plan, whether held for five days or four days per week, result in approximately thirty-four to twenty-eight hours of class time, a significant loss of time compared to what is provided under the semester plan.

But looking at the results in the table, under the most positive assumptions (that is to say, that the great majority indicating two hours or more are actually averaging two and one-half or more

hours in the classroom, and for seventeen days within each block), one then has approximately two-thirds of the faculty spending at least forty-two hours or more per block in the classroom. Recognizing that quite a few of the faculty in some disciplines spend three hours or more in classes on most days, the overall balance of class time available to a large proportion of the student body is more advantageous than what is possible under the traditional calendar.

This indicated commitment to instruction on the part of a significant majority of the faculty is seen as a supportive aspect of the earlier appraisal about the quality of the faculty body as a whole. Further support for such a conclusion, relative to instruction, is drawn from the fact that this faculty as a whole has maintained a high involvement in the operation of the Plan, and contended with difficulties and numerous challenges, for almost a decade.

Faculty Instruction —Variations In Quality

A concern for the evaluation of aspects of the curricular program under the Block Plan began with the inception of the Plan. The first survey of faculty and students was conducted at the end of the first year. During the latter part of the following fall, a second project was initiated. This took the form of an interview approach, and was conducted in the two succeeding school years, 1972-73 and 1973-74. The single objective was to sample the students' reactions to the instruction on campus, particularly as they experienced the teaching-learning process under the intensive three and a half-week blocks.

A total of one hundred and two students (fifty-two men and fifty women) was interviewed in small groups of three or four during the two years. The attempt was made to draw several names from each department, and approximately a third of the total number represented each of the three major divisions. The first-year sample consisted of only juniors and seniors, and the second-year group consisted of sophomores and juniors.

All interviews were conducted by two persons. A single question was asked of all the students, which read: In your opinion, of the

courses that you have had at Colorado College, which has been your most favored academic experience and which has been your least favored? Following the identification of a course, the students were asked to explain their decision or illustrate why the course was representative of one of the two alternatives.

In the way of general results, approximately seven percent (fifty-five different courses) of the total listing of courses in the catalog were designated each year as the "most favored experiences," and six percent (forty-four different courses) of the total represented the "least favored." In contrast to the relative small percentage of courses listed, a total of thirteen percent for the two years, fifty-five percent of the ladder faculty were involved each year in teaching the particular courses identified, both the most and least favored.

When the results were summarized for the two years, some initial indications were obtained of the distribution of the quality of instruction. These early results were reexamined to determine if there was any consistency among students in differentiating among courses, type and quality of instruction, and instructors. The results, shown in the following table, are based only on the persons who had courses identified two or more times in the course of the two years. The most favored experiences (courses) and the least favored are presented separately. The percentages of the faculty who taught these courses were twenty-one and thirteen percent respectively, which leaves a large proportion (66%) of teachers who did not fall into either category for the two "samplings" of students.

The question arises whether the best and possibly the most committed teachers on campus are included in the twenty-one percent representing the most favored courses. The particular figure (approximately twenty percent) is of interest since it closely approximates earlier findings from research conducted at the Center for the Study of Higher Education in former years. In attempts to assess the amount of excellent or exceptional teaching on a number of other campuses, chiefly through senior nominations over several years, the ratios of excellence arrived at were never greater than one to five, that is, one excellent or exceptional instructor for every five faculty members.

Number of faculty whose courses were identified as most favored or least favored - two or more times**
(1972-73 and 1973-74)

No. of times identified	Major Divisions: Humanities	Nat. Science	Soc. Science	Total No. of persons
Most favored:				
5 or more	3	2	2	7
3 or 4	5(4)*	4(1)	6(2)	15(7)
2	5	1	1	7
Least favored:				
4 or more	3	3	3	9
2 or 3	2	4	3	9

*The figures in parentheses also had one or two of their courses listed at least favored.
**The identifications were made by 102 students.

One is also led to ask whether there are significant differences in classroom instruction and styles of teaching between the seven persons whose courses were identified five or more times and the seven with two nominations in the "most favored experience" category, or what the extent of actual differences may be between the twenty percent in the one category and the thirteen percent in the other category.

During the years of the evaluative research on this campus, between 1971 and 1978, the topic of qualitative instruction was addressed several times. The continuing interest was an outgrowth of the early hypothesis that it was a faculty of high quality, or at least an unusual faculty, that took on the challenge of the Colorado College Block Plan. The results just presented, when first reviewed in 1974, did not lend much support to the hypothesis but quickened the interest in pursuing further the underlying concern.

Starting in 1974, the reserach staff was provided the opportunity to talk with small groups (five to seven students) of seniors. The

students in eight groups were queried near the end of the sessions about the quality of teaching that they had encountered and the contributions of faculty members to their lives and learning. The responses and discussions were directed mostly to the courses and work that the students found most satisfying, which voluntarily led to the repeated identification of a relatively small number of professors. Although these sessions with seniors were not recorded as before, the names of the professors who were mentioned as excellent or good instructors were listed. Later review of both lists revealed that all seven persons receiving five or more nominations in the earlier interviews in the preceding school years, were the ones most frequently mentioned as either excellent teachers or as specially contributive to student thinking and learning.

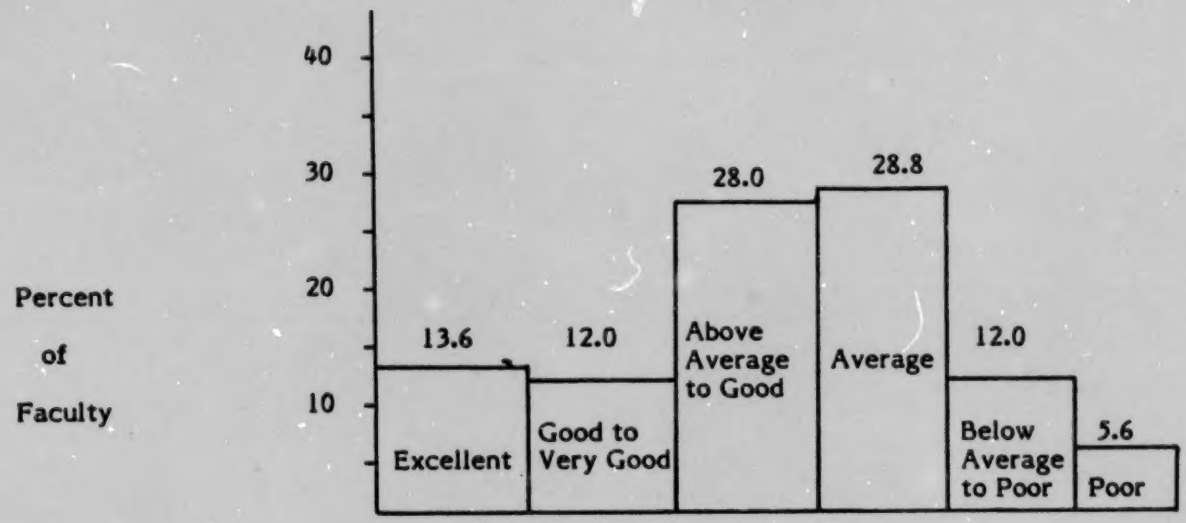
These disclosures over several years about a proportion of the faculty recognized as excellent instructors were supplemented and generally confirmed during the same period by interviews with the Deans (three persons) of the faculty. The latter discussion, however, centered chiefly on qualitative variations among departments and disciplines. The overall tentative findings regarding such variations among faculty members and disciplines, not unlike what is known about faculty in other institutions, were basic to a decision to assess more definitively the recognized variety of teaching effectiveness and the distribution of good instruction across departments. A subproject was planned and arranged to obtain a more direct and comprehensive approach to available information.

In brief, ten persons (administrative or on the faculty) were suggested as being the most knowledgeable about the Colorado College faculty in general, largely because of administrative positions held (currently or previously), the number of major committees they had chaired or served on, and length of time employed. Nine of the ten persons agreed to participate in a rating assignment of all ladder faculty members on the campus. An instruction sheet, including five categories, from excellent to poor, and short descriptions for each category, was submitted to each rater to facilitate the rating process (see Appendix G).

The purpose of this project was the provision of an additional, more complete body of information for considering the variations in quality and performance within the Colorado College faculty. The project, therefore, supplemented the student-interview results and the criterion indicators about the overall quality of the faculty, already summarized above. The focus of concern as already intimated, was not differences per se but the distribution of good instruction. This might be rephrased in the form of several questions: Are the better teachers on campus found in a broad or limited array of departments? Or, is good instruction randomly distributed across the variety of disciplines? Or, is a good liberal arts education contingent upon strength of faculty and good instruction across a majority of disciplines?

Some of the answers to such questions were provided by information obtained through the ratings of faculty. Raters were asked to use the contrived five-point "scale" so that a basis could be established for a relative comparison of all faculty members. Of course, ratings by means of such a scale do not provide a definition of the actual extremes of good or poor teaching. However, the relaltive position of all instructors on a scale, as a result of general agreement among a number of raters, provides a basis for examining variations in teaching effectiveness among the faculty. The ratings based on five categories were converted later into a distribution of six categories by subdividing the large group falling in the middle range of all ratings.

The results of this assessment are presented in the histogram below, showing the distribution across the one hundred twenty-five persons rated. When the individual ratings, clustered under the six categories, are plotted person by person, the result is an approximate bell-shaped curve, or a normal distribution, with a slight extension to the left of the median. This fact indicates that the raters utilized the full range of the five-point scale, but "assigned" a majority to the mid-category (average) in making the ratings. In reality, the larger majority of the fifty-six and eight tenths percent (56.8%) in two middle categories received ratings of four, three or two (on the five-point scale), and the average of six or more ratings placed them in one of the two middle categories.



Distribution of the Colorado College faculty, by percentages, rated and categorized for the quality of their instruction classroom activity. (N= 125)

Repeating a point mentioned above, the major finding here is in the distribution of ratings, and the normality of the distribution, suggesting that the instructional quality of the College faculty is differentially perceived, presumably related to what was known about the variations in classroom effectiveness. If the persons making the ratings had been biased positively or negatively about the faculty as a whole, the shape of the distribution would have been skewed accordingly. In this vein, one can assume significant differences between the top two and bottom two categories, but any distinctions beween the middle two, taken as groups, would be difficult to defend.

Given the general consistency among raters, very seldom going beyond three categories for individual raters (see Appendix G),

one has a basis for interpretation of results for the two extreme groups. There is no apprehension about concluding that those in the top two categories are representative of the best instruction on campus, and that a proportion of those in the third category, ranking close to those in the second, also are good instructors. In other words, it is assumed that considerably more than twenty-five and six tenths percent (25.6%) of the faculty are involved in good and effective instruction. On the other hand, only seventeen and six tenths percent (17.6%) fall into a below-average category. Thus, although one can conclude that the largest proportion of the faculty are seen as average and above average in their classroom roles (referring to fifty-seven percent in the two middle categories), it is safe to presume that at least a third of the faculty would rank as good to excellent. From what has been found to be the case on a number of other campuses, the latter is considered to be a healthy proportion. If students have the possibility of stimulating, provocative instruction in one out of every three classes, the opportunities for them are richer than what they would encounter in the great majority of liberal arts institutions.

Such a conclusion, however, has to be offered as tentative in the light of further analysis of the available information. With the ratings available on individual faculty members, it was possible to compute an average score or index for each department. These average indices of teaching effectiveness for each departmental group permitted a rank ordering of the twenty-two departments from highest to lowest.

The resulting range among the departments obviously was related to the proportions in any department which were either in the top three or bottom three categories in some departments and the lack of such clustering in others. In line with the concern about the quality of the faculty, and specifically regarding good instruction, greatest attention was given to the departments with the highest indices. It was immediately apparent that a number of departments had a majority of their members in the top three of the rating categories. This led to questions about the randomness or nonrandomness of the distribution of good instruction across the faculty or the departments. A table was set up to demonstrate this matter of nonrandom distribution, by resorting

to the data for the top forty percent--the nine departments with the highest indices.

The following table gives percentages of the faculty in the top three rating categories in the respective departments. The percentages in the fourth row are the totals of the percentages in the above three cells in each column. For example, Department A and Department H are the only two departments in which the total staff was placed in the top three categories, but Department A had half of its staff in the excellent category as compared to none in H. Five departments, B, C, D, F and G, had seventy-five to eighty percent in the top three categories, and Department I, the ninth, had sixty-seven percent. Several other departments (not shown) had between fifty and sixty percent in the upper three categories, but, with one exception, the persons were all in the second and third categories. Among the other departments (13), beyond the top nine, there were three other professors who were in the excellent category and six in the good to very good category.

The persons whose ratings placed them in the excellent category were located in twelve departments, but eighty-two percent of them were in eight of the departments with the highest indices, and sixty-five percent in only five of the high-ranking departments.

The persons (15) who were in the good to very good category also were located in twelve different departments, but sixty percent of them were in only seven of the highest ranking departments.

Percentages of Faculty Members in the Nine Highest-Ranking Departments* Who Were Placed in One of the Top Three (of Six) on the Basis of Ratings of the Quality of Their Instruction

Quality of Instruction Categories	Departments A	B	C	D	E	F	G	H	I
Excellent	50	33.3	20	20	33.4	20	12.5		8.3
Good to Very Good	12.5	11.1	40	20	16.6		12.5	40	
Above Average to Good	37.5	33.3	20	40		60	50	60	58.3
Percentage in the top three ranks	100	77.7	80	80	50	80	75	100	66.6

*A rank-ordering of all departments, except three (each having only one person rated) was determined by computing the average index score for the ratings of all faculty members in each department. (The ratings of faculty were made in the spring of 1976.)

When one combines the two top rating categories, one finds that seventy-two percent of all the individuals so categorized are located in the nine departments; the other twenty-eight percent in these two categories are located in seven of the other departments, which leaves the remaining six departments with no faculty members in the top two categories. Another way of considering the distribution is to note that fifty-three percent of those in the top two categories are located in only five departments, and the other forty-seven percent are in eleven of the other seventeen departments.

When combining all three categories shown in the table, one finds again, that seventy-two percent of all persons in these categories are located in the nine departments, which means that the remaining number (28%), which is less than half of this large percentage (72%), are distributed across the other thirteen departments.

In contrast, over half of those in the top three categories, actually fifty-four percent, are located in only five departments. This figure would be between fifteen and twenty percent if the number in the top three categories were distributed randomly across the twenty-two departments.

To summarize this series of comparison, the idea was presented that the perceived teaching prowess of this faculty, assessed through ratings made by nine persons, using five descriptions of different degrees of teaching performance, was distributed normally across six categories, that is, the distribution of the ratings approximated a normal curve. But, when the results of the ratings were examined department by department, the distribution could be described as unduly skewed. Whatever all the contingent determinants might be, the constituency of departments varies a great deal in the proportions of persons initially falling into each of the six so-called rating categories.

As implied earlier, the observed differences among faculty members and among departments is not peculiar to Colorado College. Variations among faculty personnel, on a number of characteristics and several areas of performance, are typical of all of higher education. Excellence and performance at high levels throughout a faculty, especially in the teaching-learning process, is something desired in all institutions and found wanting in the great majority. Whatever the true reality of differences in teaching effectiveness on this one campus, the particular analysis presented here is chiefly important in providing a base for reflection and continuing concern.

In sum and substance, it has been shown that a faculty such as this one which exhibits numerous characteristics of high quality, and which is the key factor in an excellent academic institution, is simultaneously a rather diverse body. The very diversity, from

other perspectives, is probably a most important contributor to the vitality of the College.

Returning to the original hypothesis, supported by a variety of data, that this faculty, as an entity, is one of high quality and serving this institution well, one has cause for asking what the essential proportion of committed faculty members and good instruction has to be for a college to advance from being average or good to excellent. Or, what should be the distribution of excellent instruction across disciplines to achieve and maintain a high-caliber experience for an optimal percentage of students? Or, more pertinently, is the variation in instructional quality among faculty of more essential concern in an institution that encompasses the special demands of an intensified learning curriculum?

VII. FACULTY ADAPTATIONS AND CHANGES

The considerations underlying any revision of a teaching program and the preliminary and final decisions to institute a new or modified curriculum, or a new calendar format, very much demand the involvement of the majority, if not all, of the faculty. This is particularly true when a change or innovation is addressed to the whole of an established institution. The great majority of the innovations of the sixties and early seventies was accomplished by developing a new institution, or a new cluster college or program, alongside or within an existing institution. Most such phenomena were created, planned and established through the participation of relatively few faculty personnel, usually only those who would be directly or indirectly involved in the new program.

The development of the Colorado College Plan, described in Chapter I, and the decisions basic to its realization involved the constituency of the total college--from the Board of Trustees to the students. In this sense, considering the execution from the earliest planning to the inception of a drastically different curricular program, this conversion on the Colorado College campus, from the semester system to the Colorado College Plan, has to be seen as a real rarity in United States higher education. It is a fact that the College changed from a very successful operation to a risk-taking endeavor, which demanded the time and concern, if not the vote, of many persons throughout the College constituency.

After the steps and details of converting from the old to the new were accomplished, all involved were then faced with the day-to-day operation and maintenance of the resulting program, however different or challenging that may have been and whether they voted for it or not. Consequently, administrators and certain committee members were interested in the degree and extent of cooperative participation throughout the faculty. In reality, general participation was largely insured by instrumental, preparatory activities, workshops, trial runs, and so forth, during the year preceding the initiation of the plan. Most faculty and many students had gained a fair introduction to numerous, underlying considerations--how the registration process would be amplified, how the new calendar would be accommodated, what some of the initial difficulties would be, what would be resolved immediately

and what might involve trial-and-error experimentation. Nevertheless, a fair amount of uncertainty, some trepidation, and even misgivings by some that had been opposed were experienced in the early blocks and months, as later acknowledged by members of the faculty in various disciplines.

The interest in general cooperation and participation, as well as in the early difficulties and general success led to annual surveys, starting at the end of the first year, and continuing for several years. This valuable evaluative venture, providing a direct means of early feedback information, was briefly described in the Introduction. Such early review efforts, very well executed and with the results rapidly reported to the faculty and students, served as a strategic, expeditive step in implementing the new calendar and addressing a number of problems and continuing concerns. There can be no doubt that the variety of information disseminated to all, as it was made available through the early surveys, was a key factor in the increasing acceptance of and confidence in the Colorado College Plan, as well as in the strong vote by the faculty in the fall of 1974 to continue with the Plan.

Teaching Methods —Explorations And Adaptations

The annual spring surveys resulted in information about various faculty procedures, such as time given to course preparation, length of class sessions, and amount of time spent with students outside of class. Methods and styles of teaching also were inquired about, and the results were suggestive of faculty efforts to break with lecturing as the major classroom procedure. But, with the inherent limitations of group percentages, the survey information did not convey the individual dynamics of many instructors who were seriously addressing the challenge of improving communication between teacher and students, especially since smaller classes, for the most part, lent themselves to dialogue and discussion.

Classroom procedures and teaching styles soon became a topic of general interest and discussion, largely out of faculty concern within departments and often as a result of different styles encountered in the interdisciplinary, team-taught courses. Abetted by such concerns and the survey results, along with an

increasing interest at the time among many on the faculty, a decision was made by members of the administration and the research staff to discuss teaching styles and methods with a sample of faculty drawn from the major divisions and all disciplines. Specifically a decision was made to conduct interviews, including three or four faculty members in each session, at least to the extent of sampling the thinking, experiences and reactions of a third of the tenured faculty. These interviews were conducted and the results recorded during the fall and early winter of the 1973-74 school year.[1]

A second series of interviews was conducted with individual faculty members, giving most attention to the same general area (teaching styles and adaptations), during the 1975-76 school year. This sample consisted of only fifteen faculty members drawn at random; all but two in this sample were tenured members of the faculty.

The results of this collection of interviews, from both sources, were reread and tallied. The concerns, problems, observations, and teaching methods most frequently introduced and discussed will be reviewed in summary fashion.

General Reactions: The one most common response or reaction voiced across the largest number of interviewees was approval general and support of the program under the new calendar. In the group interviews, where the major focus was on teaching methods and experimentation with different methods and where no questions were directed to their reactions to the Plan, the comments, reflections and "asides" were revealing of the underlying positive, supportive sentiment that existed among a large, if not the largest, proportion of the faculty. They amply portrayed concerns, acknowledged problems that were not being allayed, confessed frustrations and anxieties--but were mostly enthusiastic about their pedagogical involvements after the third year under the Plan. Of the fifteen persons interviewed in 1975-76, two

[1]The interviews were conducted by Dr. Maxwell Taylor, Associate Dean of the College and member of the research staff, and James Levison, research assistant.

professors, both fairly young and both from the same department, expressed their doubts about the merit of continuing with the Plan. All of the others revealed numerous concerns, spoke of some possible modifications, and were opposed to a return to a more traditional calendar.

At least a third of the interviewed faculty members stressed or discussed the overall flexibility of curricular posssibilities--from the time of day for holding classes and the possibilities of meeting twice a day, or breaking the classes into groups who can work together without interruption to the tremendous advantage of arranging an endless variety of field experiences, whether for an hour or two weeks.

Another significant percentage stressed the privilege of concentration on one group, relatively small, for a substantial period of time, and the singular concentration on one course for a period of time. Several saw a dual advantage of the permitted concentration, that is, while only focusing on one course with relatively few students, one was actually permitted other concentrations--time for reading, research and recreation. (This latter advantage or privilege had seemingly been realized by more than a few of the interviewees after several years of experience under the Plan and after they had made some adaptations and rethought their use of time.)

Classroom Adaptations: Among the adaptations to follow, chiefly in the area of teaching styles and methods, the faculty tended to speak not only of changes in classroom roles or methods that they had tried, especially in the early years, but they tended to be free with recommendations, usually based on their reconsidered efforts and experiences.

The one major focus of attention, probably determined in part by the wording of questions, was the lecture versus discussion procedure. The resulting smaller classes, seldom over twenty-five and frequently less than fifteen, had led to mutual planning among faculty groups and general encouragement within departments to resort to processes that facilitated classroom discussion, from a very free and open approach, relying in part on student initiative, to a structured, guided seminar style. Addressing the reading

content and assignments in such fashion, however, was not similarly easy and effective for all instructors. Whatever the problems, exploratory efforts with teaching styles and attempts by many to use discussion, were amazingly prevalent in practice during the early years throughout a number of the disciplines.

By the time of the interviews in the fall of 1973, the faculty reported styles and patterns of behavior that seemed to work best for them. Lecturing followed by discussion was the mode for quite a number in certain disciplines, especially those who saw themselves as good lecturers and believed it was the most appropriate way to cover essential subject matter. Among such professors there were some who never seriously attempted to alter their classroom procedures. Others reported that they taught mostly by a mixture of lectures and discussion, but other sources later revealed that most such instructors were lecturing fairly consistently.

Within a number of disciplines, chiefly in the social sciences and humanities, there were numerous professors who believed in the value of student involvement and guided discussion, along with using students on panels, joint paper preparation, small team research projects, preliminary work on possible examination questions, and so on. Those most successful with the use of discussion stressed the importance of remaining in control of their classes and reported using mini-lectures, often to introduce a perspective, to share relevant information, or to synthesize and summarize a discussion.

In the interview sessions on the above topic, the faculty spoke frequently of the necessity of planning and structuring each and every class session and the essentiality of being on top of their material. "Preparation and planning" was recognized and emphasized as most important if the short block period was to be fully utilized. Without such a continuous concern, according to a number of professors, class sessions could be mostly a failure.

A surprising number of the faculty spoke about "knowing" your class and knowing the students. They commented on the variations in ability and background preparation, but were

convinced that a good instructor could deal with student differences more adequately and could be more responsible to all through the use of discussion rather than lectures, in the smaller classes. But, more importantly, relevant to teaching, these faculty members felt that the style of instruction needed to be congruent with the type of students in the particular class and their motivation; they believed the issue was not as simple as always teaching one way or another. A few stressed the importance of this to the extent of not finishing the complete planning for a course or developing a syllabus until they met with the class and obtained some idea of its composition and the objectives of the students.

Quite a number of the faculty gave time and attention to a "get acquainted" process and developing an esprit de corps among each class, to effect a spirit of involvement and a small community of scholars pursuing some shared goals.

Among other usages and changes in the early years, especially as relevant to the shortened time factor, several or more faculty recommended (1) occasionally dividing a class into two groups, for example, for follow-up afternoon sessions and/or to enhance discussion, review of papers, and general advising; (2) reviewing the goals and objectives of a class with the students, considering their objectives, interests and needs; (3) more use of short papers instead of term papers, especially during the first two years; (4) use of a position paper (8-10 pages), for which a student submits a tentative outline during the first week and then develops and writes it during the block; (5) planned use of brief films and audio-visual aids; and (6) resorting to role playing (especially in some of the social sciences).

In review, the interviewing of faculty about the teaching process and their efforts and explorations under the Colorado College Plan revealed that a large proportion of the faculty had seriously addressed methods and procedures in the attempt to adapt themselves to the short blocks and to more effective use of the concentrated learning periods. Through the information received from the interviews and other sources, however, there was sufficient evidence to show that most of the serious concern and adaptive efforts to change and improve instruction, at least on a

continuing basis, were found among only a proportion of teachers on campus and that little change occurred among the ranks of the poorer teachers.

The Lives Of Faculty Under The Colorado College Plan —Summary

During the 1977-78 school year, twenty percent of the Colorado College faculty were invited to be interviewed about their professional careers in the academic world, particularly about their lives and experiences under the Colorado College Plan. Half of the persons interviewed were designated or selected, chiefly to be equally representative of the three major liberal arts divisions and also of three levels of teaching performance and recognized effectiveness in the classroom. The names of the other half of the interview sample were drawn at random from the remaining number of ladder faculty members.

The interviews were arranged and conducted by an outside person, someone who had not been active on the research staff previously and had no knowledge of the faculty constituency. This person also had no knowledge of the selection process used to identify the interviewees, and the information made available about each professor, previous to interviews, was limited to the brief academic histories found in the College catalog.

A wealth of information, mostly related to activities and experiences under the Colorado College Plan calendar and structure, was obtained through the interviewing. A summarization of such information is highly inadequate to the richness of individual faculty reporting, but presumably it can be representative of a fair variety of what was reported and inclusive of much that was held in common and shared among those interviewed. This summarization is essentially a condensation of a much more extensive, summarized report prepared by the person doing the interviewing. The initial summary was written immediately following the completion of the series of interviews.

Background: The great majority of the professors interviewed described their family backgrounds as middle or upper-middle class, with parents that encouraged and expected completion of a college education. The family and home life was seen as

traditional, where vocational involvement was limited to the male in the household and the woman's role was chiefly that of mother and homemaker. The great majority of fathers was employed as skilled laborers or in business-related occupations with a small percentage representing teaching and the ministry.

Almost all persons interviewed pursued their post-secondary education for some time before giving serious consideration to entering the field of pedagogy or college teaching. The arrival at such a decision almost invariably followed provocative, intervening experiences, such being without exception a fellow human who came to play a significant or "guiding light" role in at least partially determining the future career. Often these other persons were responsible for introducing the Colorado College faculty members to their later fields of concentration, infrequently by helping them see some body of knowledge with a completely new or enhanced perpective. These same persons of important influence also most frequently gave the initial impetus in the direction of teaching, as opposed to contemplated careers in business, industry or the major professional fields.

A fair number of Colorado College faculty interviewed had the advantage of an interdisciplinary background. Some finished college with a double major, say in philosophy and English, and continued at the masters level with one or the other. Some also carried their double interests through the doctoral level studies. Many had nonacademic working experiences before continuing on at the masters level, and these experiences added to their understanding of the meaning and purpose of a liberal arts education by enlarging the scope of their world view and of the world of work.

Not one faculty member acknowledged any regrets over the earlier choice to pursue an academic career. Some admitted having envied the salaries of business and industry on occasion but never having seriously considered leaving teaching. Most professed that they found their lives very satisfactory.

The Colorado College Plan: Without exception the interviewed faculty members were happy in their respective disciplines and received much satisfaction in teaching their particular courses in

recent years. Most accounted for their expressed satisfaction by explaining the increased opportunities under the Colorado College Plan to choose and develop courses which permitted them to be involved in areas of special interest. Over half of them introduced and discussed how the Plan encouraged more interdisciplinary involvement, both in the way of collaborative teaching and their own personal and professional development, which was presented as another source of satisfaction. The number of persons who voluntarily addressed themselves to the special advantages resulting from interdisciplinary instruction and the "blending of knowledge" as an important component of the Colorado College Plan and a liberal arts education was amazing and surprising.

Regarding their remembered initial reactions to the Plan during the exploratory and planning stages in 1968-69, the faculty members were almost as varied in their commentaries as the personalities of the men and women interviewed. A majority reported their early excitement about some intended change in the curricular program, but some admitted feelings of concern and trepidation at this stage. When the faculty's attention, after some months, was directed to some form of the Plan per se, the positive expectations and receptive attitudes were maintained by a majority. This was true, as reported, because of the careful approach employed in introducing a possible block plan and the anticipation that a greater concentration on subject matter would possibly aid the faculty in relearning the respective disciplines and in improving instruction.

The chief exception to such thinking at that stage, as it was recalled, was expressed by some of the faculty in the natural sciences. They confessed their concerns about the essential length of time presumably necessary for students to pursue their studies and the difficulty of adequately absorbing basic concepts and fundamental information to permit them to build on such knowledge at later stages. Some of these professors who spoke of their apprehension and opposing attitudes believed that they had developed a defensible system for teaching their challenging, fact-packed disciplines and were concerned about having their methods disrupted for what they perceived to be an introduction of change for the sake of change. (A rather complete story

actually was presented of the thinking and concerns of the faculty personnel, on both sides of the pressing questions during 1968-70 period, but it is not uppermost for review here.)

The positive attitudes of a majority about the Plan were maintained during the first year, with a number reporting that the whole situation became more positive in the course of the first year. In fact, most of the interviewers had remained impressed with the general adaptation of the faculty and the smooth transition that occurred between the semester and block system, even though a full accommodation of adequate space and facilities was not accomplished for some time. The fairly easy shift was attributed chiefly to the efforts of Glenn Brooks and his working relationship with the faculty, along with the early attention given within many departments to special problems, and the relative smallness of the institution. It was remembered that faculty members in all three major divisions were quick to find advantages in the Plan, thus increasing the positive attitudes and the general spirit of the early months and years. Variations in class meeting places and in the use of time and teaching styles were recognized and pursued. Prominent in this early transition in certain departments were the possibilities of new and increased field study experiences. Also, some of the advantages of smaller classes and close and more frequent contacts with students, and what appeared to be better learning environments, became obvious to faculty in many departments, but not all.

A contingent of the faculty, however, chiefly in certain disciplines, continued to convey their skepticism and negative feelings, voiced their criticism and made known their problems and difficulties. Some expressed their dislike of the necessity of daily office hours to accommodate student needs and to address questions and problems that could not be dealt with in the classes. A number of the faculty retained reservations about the Plan while gradually changing and becoming more receptive to new possibilities. Some of the interviewees acknowledged that they themselves had held various reservations simply because the best or optimal system for teaching and learning had not yet been discovered.

Teaching Styles and Course Preparation: The majority of the faculty in the interview sample reported that they had made early, or fairly early, adjustments in course preparation and teaching styles rather easily. Many had given previous or early attention (the first two-three blocks) to such matters. For all that were concerned, individual changes had been facilitated by intra-college sessions and discussions, over a preceding period of many months, where much time was given to examining and pre-planning the types of innovations and approaches that teaching under the intensified short block system would demand. A concomitant outgrowth of this activity was the rethinking given to the nature and purposes of a liberal arts education, along with the fact that many professors, but not all, seriously examined their course offerings and the substantive content of their courses. The latter focus, however, was usually a matter of time, after the experiences of teaching a number of blocks, or, for some, even after a year or two.

Not all faculty members admitted to a change in teaching style or classroom procedures, with some stating that the way they taught previously lent itself very well to the demands under the Plan. Most of the professors interviewed, however, described how their style and methods had changed over time, as they tried out different approaches. Specific modifications to the new block approach most frequently involved a change from the straight lecture style and use of long term papers to a more varied teaching strategy, for example, with a few short papers on the order of book reviews or short thematic presentations. Also, participation of students was looked on by a surprising number as a substantially new classroom resource. Informal discussion was tried by some in almost all departments but rejected after a time by most in the natural sciences, where they believed they had to impart a definite content every day in order to cover the essentials. Others in the natural sciences did not abandon the discussion format altogether, but relied upon it much less than persons in the humanities and social sciences.

The chief problems or difficulties under the Colorado College Plan were often couched in the terms of challenges. One such challenge consisted of "timing" the presentation of material over one block in order to provide an adequate base from which to

continue in the next block, all the while refraining from comparing the three and one-half week block to the sixteen week semester in terms of content covered. Another problem seen as a challenge was the teaching of students at all levels of ability and motivation in the time allotted, so as not to hold the better students back or to push the slower students beyond their capacity. Planning for teaching all levels of students, or considering all, was another main challenge for some of the faculty under the Plan. Still another was the selection of the best, or most essential, reading material for a subject field to be covered optionally in three and one-half weeks. In the offerings in some humanities departments, this led to the consideration of more and more primary sources. This also was true in some of the natural sciences and in the general studies courses. As already mentioned, what was at stake under these timing and content challenges, for some professors, was the underlying, continuing concern about the meaning of a liberal arts college and education. Many recognized that in determining what the College would offer under the Plan, and how it would offer it, the faculty were in point of fact making decisions about the nature and form of a liberal arts education.

Regarding another professional sphere, most professors stated that they could not easily stay up to date with the literature of their disipline; however, a number believed that they kept up as well as they had under the semester system. Most did acknowledge that their time for professional reading seemed to have increased after more experience with the Block Plan, and also pointed out that lack of reading time was not a continuing, major issue under the Plan. Some indicated that they make a special effort to read selected journals in their fields since they make use of such information in their classroom presentations.

A few faculty members noted that a bigger problem for them and their colleagues, more so than journal reading, was finding time under the Plan to attend professional meetings. But, these same persons, and others, emphasized that at Colorado College their major responsibility was teaching and student learning, and not research and publication. They spoke about having recognized that in coming to this College, and in order to realize the possible advantages of the new Plan, they had committed themselves to discovering and realizing the full scope of a liberal arts education.

A number of professors spoke of a generally noted change in the amount of time available for socializing during the day on campus. They believed that communication among faculty peers had been lessened significantly. This they attributed to the increased number of hours given to classes in the mornings and an increase in the afternoon office hours for many, if not all, faculty members. Also, the fact that afternoons were frequently given to committee activities pervented them from finding time to seek out the occasional companionship of desired friends and associates.

The majority of faculty (over sixty percent) stated that the new calendar has had a negative effect on the time that they have for research and writing, and that they believed there was more time for these two activities under the semester system. However, in line with major commitments just mentioned (above) the faculty as a whole did not seem distressed by this lack of time or the limited amount of writing.

The faculty members who reported definite changes in the time available for personal or professional reading were the same persons, for the most part, who found that the Plan was a deterrent to the time that they had available for writing and research and staying up to date in their discipline. For others, this pattern was not the case; these were the persons who would pursue their nonacademic interests with as much intensity as they pursued their academic interest. They said simply that if something was important to them that they could find the time to be involved in it.

Nonacademic Life and Activities: A majority (over seventy percent) of the faculty indicated that they found or made time to pursue special interests, recreation or hobbies. If changes had occurred in the time available to pursue extracurricular activities, these changes were not attributed to the Plan.

Most faculty members initially experienced some decrease in the time that they had available for involvement in campus or community fine arts and music, at least during the first year or two of the new calendar. However, after getting their "sea legs" in the Plan, their participation in cultural events returned to

normal. There also were other intervening factors in the changes of participation, such as changes in interests, professional growth, aging and family activities.

As far as any major or minor changes in the general lives and/or life styles of the faculty members over the last six or seven years, the faculty as a whole stated that while there had been changes during this time, the changes had more to do with the changing situations in their families than being a result of the Plan. Most faculty members did not find that the new program had much effect on their lives away from the College. A few professors noted that although they were spending more time on class preparation at the College and less time at home with their families in the early years, changes in their families were also involved (for example, that they were needed less at home now) and that most changes regarding family and home could not be traced to the Plan as the sole or even the major cause.

No faculty member related changes in his or her marriage since 1970 to the Plan or developments on campus. They believed that any changes in the family occurred naturally as the children grew up and left home, as the spouses (in some cases) moved outside the home to pursue employment or careers of their own, as marriages developed or matured, or as they grew professionally or their interests changed.

In overview, the varied sample of interviewees spoke mostly from a positive orientation and most reviewed the history of the Colorado College Plan and their involvement with almost nostalgic contemplation. A close identification with the Plan and the College was conveyed by all but a few; some expressed continuing criticisms of some aspects of the Plan or of the administration for not giving more immediate attention to possible modifications. With the exception of one or two persons, the interviewed faculty revealed a satisfaction and certain contentment about their general roles and instruction on this campus. With one exception, no one was seeking a position at another college, and most indicated quite the contrary. Whatever the problems and continuing challenges, whatever the criticisms, there was no indication of persons looking for a better place to teach. The

most common "tone" across the faculty reporting in this firsthand, oral fashion was future oriented, not to eliminating or seriously changing the underlying ideas or the format of the Colorado College Plan, but to improve it and to bring it closer to the full realization of its possibilities.

VIII. REACTIONS TO THE COLORADO COLLEGE PLAN

Perceptions of the Colorado College Plan and reactions to it have been a constant concern for a decade, from the time that an initial description of a tentative short block calendar was presented to the College faculty. In the ensuing weeks and months, as details of the Plan were being more completely set forth, particularly at the Faculty Fall Conference in 1969, and up to the time of the faculty meeting in late October of that year, the proposed Plan was being examined, reexamined and challenged. The most telling reaction, up to that time and probably since then, was expressed in the faculty vote of October 27. A majority of fifty-eight percent presumably took the responsibility, against considerable opposition, to place the College, and the administration and all the faculty, on a new course.

The activity of the previous year and a half had culminated in what some authorities in higher education saw as the most unusual innovation to date, at a time that the recent innovative period in higher education was beyond its heyday. Compared to all that had transpired, in the way of new colleges and experimental programs, from New England to California and from Florida to Washington, it fell to a liberal arts college in an inland state to startle educators far and wide with a unique calendar and a new address to single-course learning. But the reactions of the outside world were a very secondary concern to the Colorado College administration and faculty, once the decision had been made to institute the new calendar format by the following fall. Of more immediate concern at the time was an essential acceptance of the Plan, by all faculty members, and the operational realization of the specifics of the Plan in the early months and during the important first year.

So, in the way of early reactions, the Colorado College Plan had its birth in a near-split vote, where the size of the opposing vote represented a reaction that was not likely to be quelled by the fact of defeat. The reactions from the academic world took the form of surprise and skepticism, along with a fair amount of curiosity. Among the older alumni, graduates of five and ten years ago, a "let's wait and see" attitude seemed to be most typical.

A genuine, internal concern about the Plan, and the faculty's and students' reactions, was represented in the very decision to incorporate the Plan and very evident in the planning and implementing of an extensive survey of the participants before the end of the first year. Seeking these early reactions from those directly involved in the new program was a strategic move, one with positive, psychological, spin-off effects, probably beyond what was intended in setting up this early form of evaluation. This first survey was followed by three more, in the following years, and they are described, along with a review of some of the results, in the last section of Chapter III. A major finding of this series of surveys indicates a gradually increasing positive reaction, which was interpreted as an overall acceptance of the Plan. This fact was confirmed by the large majority vote of the faculty in the fall of 1974, in which they approved the continuation of the Plan.

During the six years of the continuing evaluation of numerous aspects of the overall Colorado College program, repeated efforts were made to sample the reactions, the degree of satisfaction and the criticisms, of everyone and anyone that had been participative in the curricular program or directly or indirectly involved in some way with the overall phenomenon of Colorado College in the seventies. (See Appendix H.) Intimations of how the program was faring and being received have been interlaced in the presentation of findings in the earlier chapters. In this chapter, a specific focus will be given to selections of data dealing directly with the reactions of various samples of people.

Student Reactions To The Colorado College Plan

Students have been queried about their knowledge of the Colorado College Plan and their thinking about it from the time they first enrolled to the time they were approaching graduation. Questions about their reactions have been included on every interview schedule and all questionnaires. At least seven different samples of students have been interviewed between 1973 and 1979, with twenty-five to fifty students in each sample, and two large samples of seniors have completed comprehensive questionnaires.

The results obtained from these numerous sources, with minimal exception, tend to be uniformly positive about the Colorado College system, and the support of the Plan seems to be increasing over the years where the students are concerned.

Data will be used from several of the student sources, all of which are representative of the other available sources. It was mentioned in an earlier chapter that a student's first reaction to the Plan is manifest in his decision to enroll at Colorado College. Between eighty and ninety percent of the entrants think that they are quite knowledgeable about the special Colorado College system when they apply for admission, and approximately seventy-five percent maintain that Colorado College was their first-choice institution. Subsequent interviews with students during their sophomore year verify that the majority were not surprised by demands and peculiarities of the block calendar and that their experiences were generally coordinate to their expectations.

During the 1976-78 years, a large sample of transfer students were interviewed, most of them having enrolled at the College after two years on another campus. Particular attention was given to those who transferred from other four-year, liberal arts colleges. These students were interviewed only after having been enrolled for three or more blocks. Again, as with the first-year enrollees, they reported being well acquainted with the idea and details of the Plan, and over seventy percent of those coming from colleges outside the state indicated that the Plan was a major, if not the chief, reason for transferring to the College.

The results of interviewing the transfers, particularly those from liberal arts colleges, proved to be rather surprising, for these students were mostly very enthusiastic about the wisdom of their decisions to enroll in this College. Among this sample, some of the most glowing reports were received about the way they were reacting to scholastic activity under the short-block calendar. The most enthusiastic reports and comparisons came from very capable students who had transferred from very reputable institutions. In contrast, the least enthusiastic reports seemed to come from the students who had transferred from two-year community colleges.

All seniors who were in the final throes of completing their education under the Colorado College Plan were seen as important groups from which to solicit impressions and reactions. The results from the two most relevant questions are presented below, along with the particular questions.

Now that you are in the final stages of completing your degree, which of the following most nearly describes your opinion concerning your overall experience at Colorado College? (Figures are in percentages.)

	1977 Seniors		1978 Seniors	
	M	F	M	F
Highly favorable	54	61	51	50
Moderately favorable	41	35	43	43
No opinion	1	0	1	1
Moderately unfavorable	2	4	4	5
Highly unfavorable	2	0	1	1

The responses for both senior classes may be seen as very favorable, regarding their overall experiences, when the top two response categories are combined. The fact that large proportions indicate "moderately favorable" takes on meaning and significance when one has the opportunity to read interview transcriptions of the several samples so involved, along with marginal comments made by many students. Many of those checking the second response indicate that they cannot subscribe to the "highly favorable," not because they are discontented with what they experienced overall, but because of a proportion of poor courses encountered (for many), constant pressure experienced (by some), inadequate social life (for some), and possibly because the term "highly favorable" is too extreme. Quite a large number are

concerned about a few changes that could be made which presumably would improve the program. A number wrote in the margins that their reactions were really in between the top two response categories, but given one or two modifications or improvements they would check the first category.

The second question, addressing a follow-up concern to the preceding one, results in a rather amazing support of the Plan, especially considering the possibility of modifications. Certainly there is only minimal indication that some students might prefer a return to the more traditional calendars (2 to 5%). The difference between the two classes, only a year apart, with the 1977 seniors showing a significant proportion advocating modifications, is of interest but without complete explanation. Through the years, the concerns about the program and possible modifications (for example, changing the length of the blocks, or changing from nine to eight blocks) have fluctuated, and in certain years the attention of many on campus, relevant to a possible change, has been temporarily amplified. The 1977 class was most likely influenced by the temper of the times, the expressed concerns of many faculty members, and current articles in the College student paper. For numerous students, all-out support of the Plan was seen as an extreme stance, since they recognized that a good program does not negate the possibility of its improvement. In any case, and whatever the degree of discernment brought to the question, over ninety percent of the students who had a four-year sampling of teaching and learning under the multiple block calendar were expressing their general approval of what they experienced.

Student Reactions To The Colorado College Plan (continued)

Should the College reconsider the Colorado College Plan in the near future? Which of the following statements best describes your opinion? (Figures are in percentages.)

	1977 Seniors		1978 Seniors	
	M	F	M	F
The Plan should be continued essentially as it stands	55	54	83	89
The Plan should be continued, but with definite modifications	43	43	11	7
Some other alternative	2	2	5	4

Faculty Reactions To The Plan

The faculty members were asked about their perception of and reaction to the Colorado College Plan in each of the early surveys, from 1971 through the spring of 1974. (See Chapter III.) Over those years there was a mild trend of increasing support, but the largest proportion each year opted for a "moderately favorable" response, which fact seemed to be coordinate with continuing concern expressed most frequently within the context of faculty committees and at some of the faculty fall conferences.

The results in the two tables show a general consistency, that is, the faculty seem to distribute themselves somewhat similarly across at least three of the response categories whether the results are analyzed by major discipline or by year of employment. In the first case, however, there is a significant change in the distribution of the faculty proportions over the five years for those in the natural sciences and the social sciences. In the natural sciences the total proportion in the top two responses has increased twenty-two percent, while in the social sciences the shift upward (11%) is within the top two responses. The major observation to be made about the data in the second set is derived

from the fact that the most recent employees tend to be as favorable to the Colorado College Plan as the faculty members who have been here for some years. In fact, the recent employees have the highest proportion checking the "highly favorable" category. These latter data reveal that eighty to ninety-four percent of the faculty continue to be favorably inclined toward the Plan. The differences that are presented in these tables would seem to be due to personality differences, or attitudinal differences among persons, and not due to a disciplinary orientation.

Which of the following best typifies your overall reaction to the Colorado College Plan at this point in your experience? (Figures are in percentages.)

	Humanities		Nat. Sciences		Soc. Sciences	
	73	78	73	78	73	78
Highly favorable	27	27	21	30	38	49
Moderately favorable	54	59	45	58	45	36
Moderately unfavorable	14	12	27	10	14	12
Highly unfavorable	3	2	7	2	3	3

Year of Employment

	Pre '63	'63-'67	'68-'72	'73-'77
Highly favorable	32	29	32	41
Moderately favorable	51	57	62	39
Moderately unfavorable	13	14	6	16
Highly unfavorable	3	0	0	3

Reactions Of The Alumni

In the fall of 1978, a survey was conducted of samples of Colorado College alumni. There were several underlying objectives to this study, which was one of several projects planned for the final year of the evaluative research program. A survey of the alumni was scheduled at this late date to permit the inclusion of several classes which had graduated after the inception of the Colorado College Plan. The graduates of 1977 represent the last of the six classes surveyed; this class was one of the two which were involved in a four-year study during the seventies. The other persons included in the alumni survey were in the samples drawn from the classes which had graduated in 1960, 1965, 1970, 1972, 1975 and 1977. The graduates of 1972 were included because they were the one group which was enrolled for two years before the beginning of the Plan and for two years thereafter.

Twenty percent samples were drawn at random from each of the six alumni groups. Response to this survey, abetted by one follow-up card, resulted in return of approximately seventy-two percent across the six classes.

The content of the questionnaire included items particularly relevant to the Plan, which served as the source of the data to be presented here. The graduates from the classes ranging over eighteen years were first asked "how much do you understand about the so-called Block Plan and its functioning?" The graduates of 1960 and 1965 stated that they were not well acquainted with the Plan, but seventy-five percent in both classes indicated that they were somewhat acquainted or that they had read about it. The graduates of the last three classes, since 1972, were obviously well acquainted with it, with ninety-seven to one hundred percent acknowledging the same.

A following question was open-ended in structure, and all graduates were asked to respond in writing to whether "you think this unique plan should be maintained or would you advise the College to return to the traditional program of the pre-seventies?" The written responses were read by two judges (as a check on the accuracy of categorization) and placed in one of four categories: (1) maintain Plan as is, (2) maintain Plan with modifications, (3) return to the traditional, or (4) don't know or no answer. This question was the only real open-ended one in a

lengthy questionnaire, and many of the persons either took advantage of this opportunity to write or they were actually as enthusiastic as they implied in their extensive and exuberant remarks in favor of the Colorado College Plan. A goodly number wrote as if they were concerned that the essence of their remarks would not be accepted, or as if they were worried that not enough other people understood the advantages of the Plan.

The results of classifying the responses for the graduates of the six years are shown below. The general progression from left to right, from smaller to larger percentages, in the top row demonstrates that the more recently a class graduated the more likely they were to be in favor of maintaining the Plan. The progression, as noted, becomes a little smoother when the top two categories are combined.

	Percentage of responses for the graduates of each year					
	1960	1965	1970	1972	1975	1977
Maintain Plan as is	51	45	64	83	88	78
Maintain with modifications	6	11	11	8	10	18
Return to traditional	3	8	4	3	0	4
Don't know (or no answer)	40	36	21	6	2	0

The reverse progression, from larger to smaller percentages in the bottom row, strongly suggests that the amount of knowledge about the Plan is related to supporting it. But, direct experience with the Plan, more than mere acquaintance or knowledge, as suggested by the figures for the years after 1970, appears to be basic to high acceptance. The last two classes (1975, 1977) spent all four undergraduate years under the Plan. The size of the percentages after 1970 probably is of greater significance than the progressive changes over the years; over ninety percent of the three groups that had been directly involved with the Plan were in favor of continuing this system, with or without modifications.

Another question, following the previous one, resulted in data lending confirmative evidence to the graduates' feelings about the Plan and the College. The question read "If you have or had children of college age, how would you feel about their enrolling next fall at Colorado College?" From seventy to eighty-six percent in each of the six classes indicated that they would be "strongly in favor" of their children enrolling or "would encourage them to consider enrolling." Since the responses here were similarly very high (that is, favorable) for the graduates of all six years, such results represent a manifestation of faith in the College. That is, whether the programmatic change seemed sound or not, they believed enough in the administration and faculty that they could assume a change of this sort would not be to the school's disadvantage.

The last section of this alumni questionnaire was directed only to the 1972 graduates, the class which had two years of experience with the Colorado College Plan and two years before the Plan was instituted. The results from all the questions cannot be presented here, but stating the results from a selection will convey the major emphasis of their thinking. The percentages were much the same for both sexes, so the average for the two will be used again.

Sixty-two percent stated that they were more involved in the variety of different courses under the Plan, as compared to twenty percent who thought that they had been more involved under the semester system. Sixty-eight percent believed that they learned more in the variety of different courses under the Plan, and fifty-nine percent thought that the Plan enabled them to get a "better" or more complete education, as compared to thirty-one percent who believed this would be more the case under the semester system. Eighty-six percent indicated that the Plan permitted one to take a greater variety of courses, and seventy-two percent state that it permitted more time for contemplation and personal growth. Over sixty percent indicated that under the Plan they participated more in class discussion, prepared more extensively for classes, and had more effective relationships with the professors (81%). When asked about difficulties in adjusting to regular schedules and a number of courses after entering the realities of graduate school or occupational activities, seventy-five percent indicated that "the change posed no problems."

Summary

The above review of reactions to the Colorado College Plan, obtained from students, faculty members and graduates of the College, provides a rather broad base to gain several perspectives on the Plan, and about life and learning under the intensified calendar. The particular data from the seniors, which results in a somewhat stronger or more favorable story than that of the faculty, is actually a very limited sampling of the variety of reports from students. A wealth of information, received through interviews, from both students and faculty members, could not be utilized here. The summary of the faculty interviews did introduce a little of such information from that one source, and the intimations of the report received from person after person, one at a time, is that faculty members actually subscribe more to teaching under the Plan than the group data (drawn from the faculty surveys) suggest.

What should be evident, even from the results presented in this chapter, is that the information made available is consistently much more favorable than unfavorable in considering the function and the merits of the Plan. All in all, the participants in this unique Colorado College program seem to be laying the foundation to make believers out of many looking on from the outside.

IX. SUMMARY: COLLEGE ACCOMPLISHMENTS AND RESEARCH FINDINGS

Introduction

The period of time since the end of World War II was made more replete with new developments and attempted changes in the realm of higher education than any preceding period of 30, 50 or 100 years. In a few states, the number of academic institutions more than doubled in less than three decades, and none of the major geographical regions were without well-known programs including whole institutions given over to innovation and explorations. Many of these developments were promoted and initiated as a serious address to improve and vitalize the curricular experiences of college students or some particular sample of college youth. Quite a number of such institutions, claiming to have made a serious change in the typical, traditional undergraduate curriculum, achieved the status of distinctiveness--at least for a time.

At the present time, in the late seventies, we are already some years beyond the period of greatest concern and activity regarding new developments and educational formats. A surprising number of the new, innovative institutions of ten and twenty years ago have either returned to more traditional calendars, programs and instructional methods, or they actually have come to their demise. Others that claimed to be innovative, nontraditional or experimental had actually never gotten far beyond traditional programs and curricula. On the other hand, quite a few institutions that were created under the guise of being new and different, or that described themselves as a breakthrough to a better system, have continued somewhat in the same vein.

When one considers all of post-secondary education, it is difficult to estimate how much the mass of universities and colleges have profited or learned from the efforts of others. Presumably, many administrators and members of faculty across the nation have been given cause to think about their programs and the quality of education on their campuses. But, it is very doubtful that faculty members in most institutions have seriously examined their own programs, courses or teaching methods, to the point of making significant changes. Most faculty have not been instrumentally involved in a program or college which faced them with the reality of making some changes, either in their thinking and planning or classroom practices.

The latter point was amply illustrated in Chapter VII, in which the results of interviews with the Colorado College faculty revealed that a majority had seriously examined and reexamined the program content of their courses and their classroom practices, and many had varied their instructional practices in attempting to arrive at a most appropriate method. Perhaps more important, many had involved themselves, over the recent years, in examining and discussing the merits of the Colorado College Plan, while fewer persons have given time to the fairly continuous quest of seeking improvements in the Plan.

The contents of this monograph, particularly prepared for the lay public of the College, have been limited to a brief history of the development of the Colorado College Block Plan, the story on the program and campus development since 1970, a review of the students and faculty and how they have fared during the years, and more recently, to various aspects of the Colorado College Plan.

In this last chapter, a review and overview is taken of the accomplishments, changes and effects witnessed on this campus during the years of the Plan. But such a review should be prefaced by the major findings of this evaluative research program, which was begun during the first years of the existence of the Plan.

The distinctive Colorado College program, in operation over nine years, has been conducted with increasing success and has been well received by the administration and the great majority of faculty members and students. Over the years, very high proportions of both the faculty and student body have manifested their general approval, pending some reservations and possible modifications, of the teaching-learning process under the Colorado College Plan and of the continuation of the Plan. From the perspective of the outside evaluator, drawing upon a broad and varied collection of information and data, the College has functioned very successfully under the framework of the short-block calendar and the intensified, single-course curricular format. A large proportion of the students has shown evidence of changing significantly over the four years on relevant personality characteristics; approximately forty percent, a comparably high

percentage, have shown a significant positive change in their intellectual orientation; and over ninety percent of the graduating seniors have professed a favorable opinion about their overall experiences at Colorado College.

Institutional Accomplishments

The realization of the Colorado College Plan, that is, the preceding stages and serious considerations, the planning and amazing amount of necessary communication, the political maneuvering and the essential decision-making, all that went on before a vote was taken in October of 1969, would be an extraordinary story of the social dynamics of a college faculty on any college campus. The odds are, however, that the vast amount of progressive activity, leading to a viable decision, could not have occurred on any other campus. A variety of factors and the presence of a variety of key personnel on this campus provided a peculiar, if not unique, situation that allowed for the overall process to take place. The development and implementation of the Colorado College Plan are recognized as a major accomplishment, whatever might have followed thereafter.

Several of the more specific developments or stages, to follow, are recognized as additional accomplishments.

- The Colorado College administration and faculty, starting in the spring of 1968, initiated and successfully pursued an extensive, exploratory review of the College's existing mission, program and curriculum, with the intent of possibly removing and revitalizing the liberal arts program. The College administration, the members of the faculty's Committee on Committees, and the faculty as a whole adroitly evolved a unique, functional scheme to expedite the exploratory review of the existing program and to provide for effective, continuous leadership in the quest for a revitalized liberal arts program.

- Under the appointed leadership (in the person of Professor Glenn Brooks) and the creation of a Planning Office, the basis was established for the

development of an intricate but effective communicative network, including the faculty in all departments and students from many segments of the campus, to address the challenge of devising a new program.

- The Colorado College staff, involving all constituencies, expeditiously and successfully, but not without challenge and duress, changed from a two-semester to a nine-block calendar, from a multi-course to a single-course instructional mode, within the period of two academic years--from the fall of 1968 through the spring of 1970.

- The administrative personnel of the College played a consistently supportive role during the development and institution of the Colorado College Plan. During the years that followed, administrative leadership, together with decisions made by the administration and the Board of Trustees, was very essential to implementing the construction of new facilities and the improvement of existing facilities. An extended enhancement process was instrumental to accommodating a great deal of classroom space and improving classroom environments.

- To complement and supplement student life and to round out the totality of student experiences, a Leisure Program of numerous, continuing opportunities, a residence hall program, and an extensive physical education program were instituted and increasingly implemented over the years. This phase of the total College Plan was planned and financed from the beginning as an essential complement to the academic program.

- The College's concern for employing and maintaining a faculty of high caliber appeared to be amplified during the years of the Plan. Among the total number of appointments made since 1971, a significant proportion of them were well-considered, key

appointments which almost immediately had the effect of strengthening the status and visibility of several departments. A third of the post-1971 appointments has served to substantially increase the number of faculty on campus ranked as very good or excellent instructors.

The College Faculty And The Plan

The evaluative research of the College began with several assumptions. One such surmise was that the faculty that voted in the Block Plan was composed of either a large proportion of unusual persons or excellent academicians, or both. The available information obtained from the faculty and other sources permitted an analysis of the general quality of the total body and provided a basis for inferring that there was a fairly large contingent of excellent teachers. This contingent, however, was found to be nonrandomly distributed among the departments. Notwithstanding the latter fact, the variety of information assembled about the faculty permitted the conclusion that this collection of professors was an extraordinary group, and the success of the Plan to date was related to the high quality of an unusually large number of very good and excellent teachers. Of similar importance to the on-going program was the integral involvement of most faculty members in the functioning Plan, a close identification with the Plan and the College, and the vocal commitment to maintaining the Plan.

The Colorado College Plan And Students

By the beginning of the fourth and fifth years of the Colorado College Plan, a very high proportion of the entering students was reporting that the "particular academic program" and the "high academic reputation" of the College were two of several major reasons for enrolling. Whether for such reasons or not, the variety of information available on the entering classes of 1973 and 1974 suggests that the College is drawing a high percentage of student clientele which also would be eligible for admission to other American colleges and universities described as "highly selective" and "very highly selective."

Very briefly, the great majority of students admitted are above the national means on the Scholastic Aptitude Test scores, and sixty to seventy percent are above a national average on scales assessing intellectual disposition and academic orientation. But, less than ten percent rank very high on the same scales.

A majority of both men and women is very mature for their age, compared to college students in general. Compared to students of the mid-sixties, they are more liberal, more sophisticated, more tolerant and less religious. And probably most relevant to their lives as students in a good college, they have high expectations of the College and look forward to profitable learning experiences.

A large proportion at entrance had a combination of high ability and fairly strong intellectual interests; for them the intensified learning opportunities under the Colorado College Plan, especially with stimulating instruction, should have been very satisfying and more profitable than for a variety of other students.

The developmental story for the students, after spending four years on campus, is not one of much change, at least not on the majority of questions directed to aspirations, attitudes, college preferences and so forth. With some exceptions, the orientations and thinking of the freshmen would have been the most appropriate basis for predicting their thinking as seniors. But, when one considers the indications of what they were like as freshmen, that is, a selective group of students, the limited changes by the senior year do not suggest a negative conclusion.

When the concept of change during the college years was assessed on an individual basis, that is, comparing freshmen and senior scores for each individual (rather than comparing the combined scores for groups), a fair amount of change over four years was observed. A large proportion of the students changed in a positive direction, both in the way of their intellectual dispositions (41%) and as regards subsets of personality characteristics (with 37% and 45% showing significant positive change for 1977 and 1978 seniors respectively).

Two sets of self-report analyses of individual change or development were used to show that the seniors thought or knew that

they had changed--and in what ways. For example, more than twice the number (83%) believed that they had progressed greatly in the knowledge of specific information and terms in their major field, but only thirty-five percent felt they had gained an understanding of the scientific method. When the students reported on the changes they believed they had experienced, they revealed a variety of changes, with the largest numbers reporting intellectual growth (25%) or psychological (personality) change or development (24%).

The seniors in the two classes also were asked to report on themselves, or asked to relate how they felt or believed they had changed in general or progressed on some abilities and skills. Through this rather subjective approach, generally questionable because of the misgivings we have about self-perception, a whole collection of interesting observations was made available. The chief defense for such findings derives from the large numbers who report similarly about how they think they changed.

Acceptance And Approval Of The Plan

- The Plan was initially approved and instituted (1969) by an approximate six to four ratio of the faculty, and five years later the faculty approved the continuation of the Plan by an eight to one ratio. In support of this shift, in 1973, seventy-seven percent of the faculty indicated that their overall reaction to the Plan was highly favorable or moderately favorable and this figure changed to eighty-six percent in 1978.

- In the fall of 1973 and 1974, eighty-eight percent of the entering students indicated that the special college program was one major reason for their choice of Colorado College; upon approaching graduation four years later, ninety-four percent of the seniors in these two classes reported that their overall experiences at Colorado College had been highly favorable or moderately favorable. And across the two graduating classes, over ninety-five percent believed the Colorado College Plan should be continued, with or without modification.

- The alumni of the classes of 1975 and 1977, one to three years beyond their graduation, were very much in favor of the Plan, with ninety-six to ninety-eight percent voting for maintaining it with or without any modifications.

APPENDIX A

A Proposal For The Establishment Of A "Committee For 1974"

It is proposed that a new committee be formed, to be named "The Committee for 1974," to become effective in the fall of 1968.

1974 will be the centennial year for the College. The purpose of establishing this committee is to give us a target date, 7 years from now, for the kind of careful and considered reflection concerning the future of Colorado College in which any institution must always engage. The proposal is designed to make this process of planning and preparing for the future as explicit as possible, and to involve as many of the consituent parts of the College community in it as possible.

The purpose is not to devise a "Master Plan 1974." Rather, the purpose is to have a group of people, representing all parts of the College community, address themselves to the task of figuring out what kind of a College we wish to be, what kind of a College it will be possible for us to be, and how these two projections can be brought into meaningful and productive relationship.

Specifically, it is suggested that such a committee address itself to such areas as the following:

1. The nature of the student body

   What is the optimum size for our student body in 1974? What are the chances of attaining it? What kind of student shall we be looking for, in terms of intellectual capabilities, geographic origin, educational background, socio-economic group, major interests, etc.?

2. The nature of the faculty

   What size faculty are we projecting for the centennial year and beyond? In what areas does the faculty need augmenting and strengthening? What should be the sources for new faculty, and what special characteristics and talents should we look for? What are the problems in terms of faculty recruitment and retention, and how can these problems be handled?

3. The nature of the curriculum

In what general direction do we expect curricular changes to proceed between now and 1974, and what kind of curriculum do we envisage for the 1970's and beyond? What, if any, new experiments do we contemplate to keep pace with a changing student body and with changing conditions of and outlooks on education? There are many options here, such as the creation of new interdisciplinary programs, the re-establishment of a common core, emphasis on Seminars, Independent Study, off-campus programs. All of these are related to regular course offerings.

4. The finances of the college

What are our expectations as to the financial position of the College in its centennial year and beyond? What are reasonable projections for tuition income, for size and yield of the endowment fund, for alumni, corporate and foundation support, and for funding by governmental bodies? On the expenditure side, what are appropriate projections for faculty salaries and other expenses? What funds will be available for curriculum experimentation and innovation?

5. The environment

How do we envisage the physical setting of the College in 1974? What, if any, new buildings are planned or should be planned? What ratio of residential to non-residential facilities for our students do we anticipate? What landscaping and other campus development designs are indicated? What efforts might be made to bring related organizations (research, etc.) into the proximity of the campus?

6. Conditions of student life

How do we envisage the future of college-student relationships? What are the responsibilities on both sides in this relationship? How much freedom, and of what kinds, do and should our students have; and how do their rights and privileges, and the ways in which these are expressed and exercised, relate to the total educational effort of the College? What concepts in student-faculty relationships can we project for 1974? Should these relationships be more remote than they are at present, giving students a greater degree of freedom away from their academic work; or should they be closer than at present, with a view toward a more real "community of learning"? What are the implications of taking either of these positions, or of intermediate ones; and what are the techniques by which whatever goals are set can be attained?

7. Relations beyond the campus

What should be the College's relations with other groups--the local community, other educational institutions or groupings of such institutions? What functions can and should the college serve as a cultural center for the area, as a resource for other educational institutions (for example, the public schools, Junior Colleges, etc.)?

Obviously, the foregoing seven topics merely scratch the surface of the kinds of questions which the College should ask of and for itself. Obviously, too, answering the questions will require a thorough inventory of what the College is doing now, what its present resources are and how these are utilized, as well as projecting these processes into the future.

With respect to the constitution of the proposed "Committee for 1974":

1) For the current academic year, 1967-68, the Committee on Committees itself should initiate some of the discussions to which this proposal refers; it might, in fact, consider itself a precursor of the committee, which is to be established as of the fall of 1968.

2) Next spring, if such a committee is to be constituted, the following should be included:

a) One faculty member to head the committee. It would be well to have some continuity in this position rather than an annual turnover. It would also be desirable to relieve the chairman of a part of his teaching load, to enable him to do the thorough job that is anticipated and required;

b) two other faculty members, again with terms longer than one year;

c) the Chairman of the Committee on Committees or a member designated by him;

d) the Chairman of the Academic Program Committee or a member designated by him;

e) the President of the College; the Dean of the College; and the Vice-President for Development;

f) one member of the Board of Trustees;

g) one alumnus of the College;

h) the President of the CCCA and one other student to be designated by the CCCA.

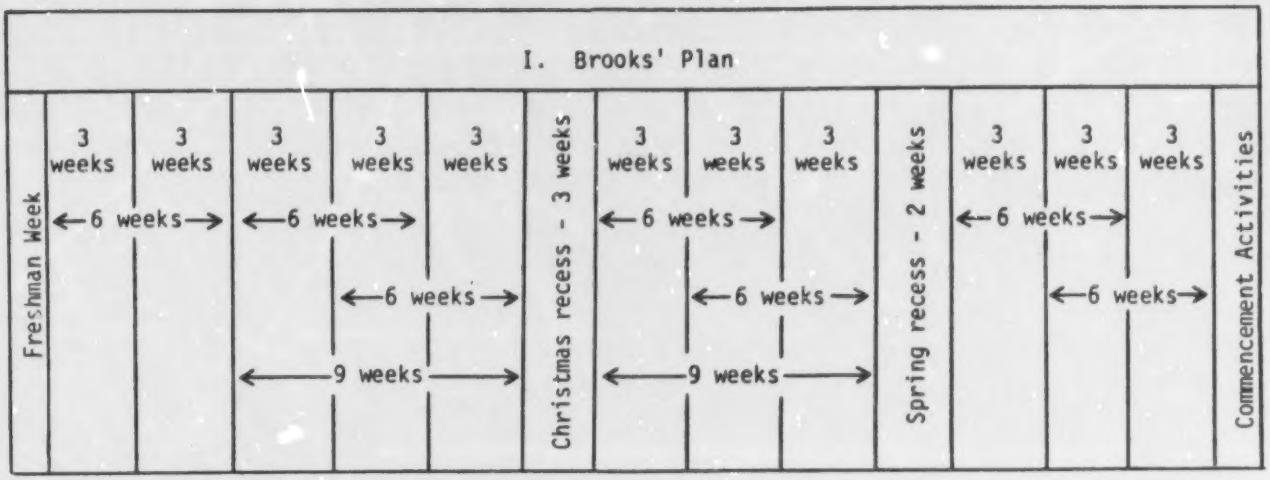
It is further proposed:

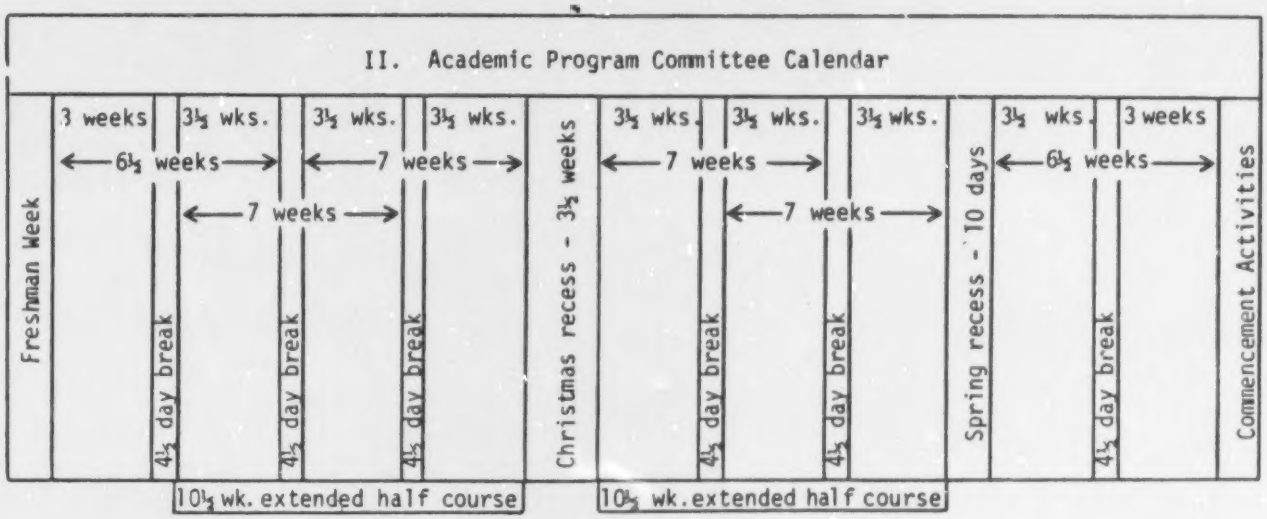
1) that an effort be made to obtain financial support for the work of the committee, to make it possible for the group to function with maximum effectiveness. Funds should be made available over the span of the committee's existence to compensate the chairman for time released from teaching; for travel of members of the committee; for secretarial assistance; and for other purposes.

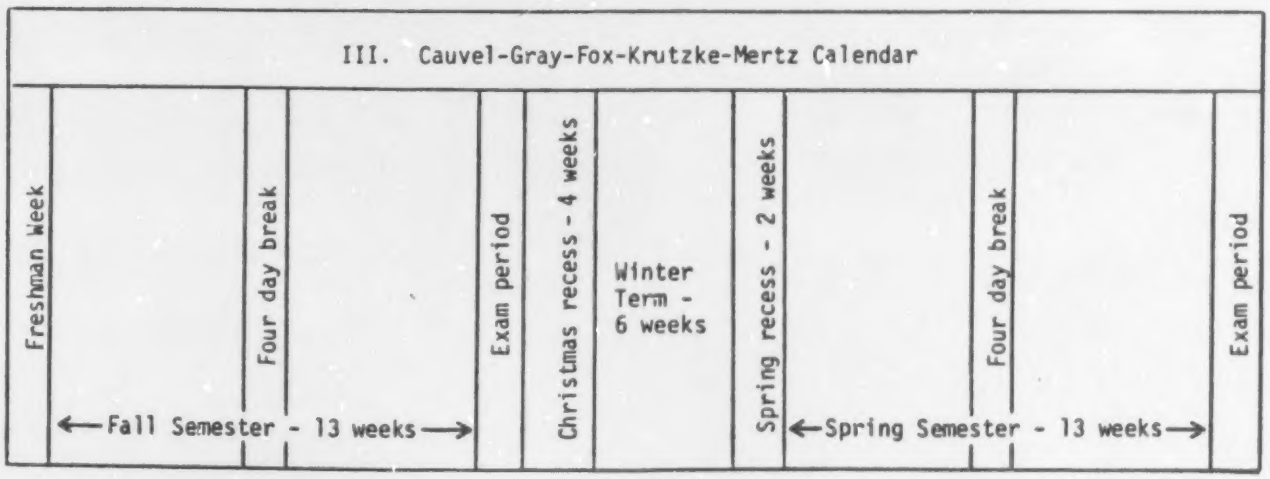
2) that one faculty meeting a year be set aside to hear and discuss progress reports from the committee, and that the other constituent parts of the College community (the Board of Trustees, the administration, the alumni, and the students) similarly remain in close and continuing touch with their respective constituencies throughout the period of the committee's activities.

Fred A. Sondermann, Member
Committee on Committees
Spring, 1968

THE CALENDARS







LEISURE PROGRAM EVENTS - 1975-76

FOLK-JAZZ	EVENT	DATE	ATTENDANCE
BLOCK I	Hosanna - Jazz	9/15/75	400
BLOCK II	City Limits - Folk-Rock	9/30	350
BLOCK II	Gone Johnson - Folk-Rock	10/19	250
BLOCK III	Jerry Jeff Walker - Folk-Rock	11/16	1400
BLOCK IV	Tim Duffy & Rosewood Canyon - Folk	12/14	200
BLOCK V	Doc & Merle Watson - Blue Grass - Folk	1/20/76	1300
BLOCK VI	Apple Pie - Folk	2/6	300
BLOCK VII	Tim Weisberg - Jazz	3/13	1100
BLOCK VIII	Amerikan Reskue (Cancelled)	4/25	
BLOCK IX	Outdoor Concert - Blue Grass - Folk-Rock	5/16	600
CO-CURRICULAR			
SYMPHONY TICKETS (65 Provided)	The Pablo Casals Trio	10/5/75	62
	Corinne Curry, Mezzo-Soprano	11/23	57
	Andre-Michel Schub, Pianist	1/25/76	65
	James Buswell, Violinist	2/22	37
	Mary Costa, Soprano	3/21	15
	John Browning, Pianist	4/25	50
SYMPOSIA	Women's Week	10/12-18	200
	Prison Reform	10/14	100 +
	Southwest Symposium	11/1	300 +
	Presidential Symposium	4/8	2000 +
	Alternative World Futures Symposium	3/17	300
DANCE	Murray Louis Dance Group	3/8	800
CONCERTS	Hosanna - Jazz	9/15	400
	Mirecourt Trio-Chamber music	9/19	800
	Alfred Street, Guitar	10/6	800
	Raymond Herbert, Pianist	10/20	600 +
	TASHI-Violin, Piano, Cello, Clarinet	1/15/76	800
	Sonny Rollins, Jazz Saxaphone	2/23	800
	Ray DeWitt, Clarinetist	3/18	350-400
	George Butte, Pianist	4/8	150

CO-CURRICULAR - CONT'D

	EVENT	DATE	ATTENDANCE
LECTURES			
BLOCK II	"Woman's Perspective on Local Politics", Ms. Mary Kyer.	10/13	150
	Bicentennial Lecture "The Humanism of Science" by Dr. Raymond Seegar.	10/15	500
	Lecture "Humor, The Secret Weapon Women" by Betty Swords, Also Slide Showing.	10/17	200
BLOCK III	Israel Awareness Week - November 2 - 8		
	Lecture, "Bagels" by recent Israel traveler.	11/2	100
	Film, "Sallah" & Panel Discussion.	11/3	70
	Lecture & Slides "Report from People's Republic of China by Prof. M Wormington.	11/11	100
BLOCK V	Conversation with Congressman William Armstrong.	1/9/76	100
BLOCK VI	Lecture, "The New Vietnam: Perspective on the Transition of Governments" by Paul Quinn Judge.	2/10	100
BLOCK VII	Alternative World Futures Lectures	3/17,18,19,20	300
BLOCK VIII	Presidential Symposium Addresses:	4/6, 7, 8	2000 +
	"The American Presidency in 1976", Theodore Sorensen		800
	"Press & President: The Undeclared War", Henry Hubbard.		500
	"The Presidency, Dissenting Perspectives", Prof. M. Parenti and Mr. Pipp Boyles.		350
BLOCK IX	Film, "The Home Movies of Eva Braun" and Lecture by Jerry Kuehl.	5/20	-*

*Attendance Figures Not Available

CO-CURRICULAR - CONT'D

	EVENT	DATE	ATTENDANCE
ELEVEN O'CLOCK SERIES			
BLOCK II	Film "The Scars" & Lecture, Mr. K. Tanimoto, Hiroshima Survivor.	10/9	200
BLOCK III	"Mid-East Update," Profs. Lee, Showalter and Sondermann.	11/4	350
	"America: A Nation of Nations", Prof. Arthur Pettit.	11/6	300
	"Towards A Third Culture: The Place of Science in Education" by Prof. D. Hawkins.	11/13	200
BLOCK IV	"New Directions in the State Department under Secry. H. Kissinger" by James Relph Jr.	12/4	250
	"Is Natural Science Essentially Political?", Prof. J. Compton.	12/11	250
BLOCK VI	"State of American Commonwealth", Profs. Fuller, Hochman, Ellard & Yaffee.	1/22/76	300
BLOCK V	"The 1976 Election: Will it be Different", Milton Viorst.	2/12	400
BLOCK VII	"The Future of Judaism in a Modern World", Prof. S. Foster.	3/4	200
	"An Examination of the Theory of Evolution," Dr. W. Bradley.	3/11	600
BLOCK VIII	"The Presidency & The Economy" by Dr. R. Knapp, Dr. C. Griffiths & Mr. R. Eckert, Labor Repr.	4/8	350
	Symphony Trio	4/15	600
BLOCK IX	Law Day: "Criminal Process-Close-Up"	5/13	500

CO-CURRICULAR - CONT'D

	EVENT	DATE	ATTENDANCE
ENDOWED LECTURES			
BLOCK VI	Demarest Lloyd Memorial Lecture "The Mysteries of Modern Fiction" by Eliz. Hardwick, Advisory Ed. of New York Review of Books.	2/9	750
	Roberts Memorial Lecture "The Incredible World of Sleep" by Wm. C. Dement, Stanford Medical Faculty.	2/16	800
BLOCK VIII	W. Lewis & Helen Abbott Memorial Lecture: "Toward a Responsible Presidency." by Mr. T. Cronin, Brandeis University.	4/8	900 +
FILM SERIES			
Films:	14 Classics, 2 Documentaries, 17 Foreign, Specials: Stanley Kubrick Directs, Froncois Truffant Directs, Silent Film Festival, Cary Grant Festival, Marx Brothers Film Fest, The Early Mel Brooks, 6 Free Films & One Special Price		
EXTRA-CURRICULAR - RESIDENCE HALLS			
ALL CAMPUS PARTIES			
	Inter-Fraternity Council Dance	9/20	150
	Frosh Square Dance	9/24	100
	Frosh Dance	9/25	300
	Green Beast DJ Party	10/2	300
	Thanksgiving Party	11/27	150
	Hockey Party	3/4	300

EXTRA-CURRICULAR - RESIDENCE HALLS - CONT'D

ALL CAMPUS PARTIES		
Spring Square Dances	3/12,4/19,5/14	350 +
BBO	4/10	350
Friday Afternoon Club Party	4/16	200
Hockey Party	1/20	200
SMALL RESIDENCE HALLS		
Arthur House Star Trek Party	9/25	150
McGregor Silent Films	10/4	100
French Crepes Party	10/13	50
SYMPOSIA, LECTURES, DISCUSSIONS PROJECTS		
MECHA Open House	10/27	25
C. Bukowski, Poet	1/13/76	100
Minority Planning Session	3/20	20
Alternative World Futures, Prizes and Refreshments	3/20	50-100
Presidential Symposium Banquet	4/12	30
Presidential Symposium Abbot Memorial Lecture Reception	4/12	350 +
CHARITIES		
Run For Fun	10/15	20
Silver Key Film	12/10	35
Volunteer Action Dinner	12/14	50
Special Olympics	5/10	200-300
SPECIAL EVENTS		
Halloween On Ice	10/31	350
Thanksgiving Day Film	10/28	15
Broadmoor Brunch	12/14	15
Viennese Ball	2/13/76	400
Dance With Lance	3/20	350
Public House	3/5	20
Trivia Bowl	5/12	500 +
Mayfest	5/7	500 +
Mountain Party	5/25	20

EXPERIMENTAL STUDENT GRANTS

	EVENT	DATE	ATTENDANCE
BLOCK I	Robin Maynard, Batik Workshop	Sept.	Workshop & Display
	Michael Berman, Themebook	Sept.	
BLOCK II	Fred Powell, Photo. Interest Group	Oct.	Jackson House Dk.Rm.
BLOCK III	Dave Lowry, Greenhouse	Nov.	
	David Fenza, Poetry Workshop	Nov.	Readings.Ben's Base.
BLOCK IV	Betsy Nachman, Renaissance Dinner	Nov.	Jackson House
	Betsy Nachman, Painting	Nov.	Jackson House
	Life Drawing Class	Dec.-May	
BLOCK V	Steve Winships, Dance Workshops	Jan.	Cossitt
	Petra Hall, Art Show	Feb.	
BLOCK VI	Don Clark, Radio Controlled Sail Plane	Feb.	Display-Rastall
	Dave McConnell, Ceramic Design in Ben's Basement.	Feb.	Ben's Basement
	Bill Eager, Bookrack in Rastall	Feb.	Rastall Lounge
BLOCK VII	Carlos Davidson, Kite Festival	Mar.	Washburn Field
	James Prouty, Lute Construction	Mar.	
	Tom Latka, Rebuilding of Kiln	Mar.	
BLOCK VIII	Wendy WEiss, Loom Construction	Apr.	
	Frank Lane, Arthropod Processor	Apr.	
	Paul Tanaka, Indian Prints	Apr.-May	Rastall Lounge
BLOCK IX	John Hurdle, Memory Chip for Minicomputer.	Apr.-Sept.	

OUTDOOR RECREATION

BLOCK I	Outdoor Recreation Weekend	9/24	15
	Aspen Bike Trip	9/24	30
	Continental Divide Hike	9/24	67
BLOCK II	Westcliffe Horseback Trip - MECHA	10/22	12
	Telluride Hiking Trip	10/22	11
	Pikes Peak Hike	10/22	350
	Halloween On Ice	10/31	8

OUTDOOR RECREATION - CONT'D

	EVENT	DATE	ATTENDANCE
BLOCK III	Wright-Ingraham Land Preserve Trip	11/13	3
BLOCK IV	Pine Tar Clinic	12/11	8-10
BLOCK V	Outdoor Rec. Leadership Training	1/9	12
	Copper Mountain Downhill Skiing	1/10	39
	Cross Country Skiing	1/18	-*
	Cross Country Skiing	1/25	11
	Telluride Downhill & Cross Country	1/28	45
BLOCK VI	Copper Mountain Downhill	2/7	30
	Westcliffe Cross Country Skiing	2/25	10
	Winter Mountaineering in Sangres	2/25	8
SPRING BREAK	Mexico Volcano Trip	3/24	19
	Escalante River Trip	3/24	16
BLOCK VIII	Bandelier National Monument Trip	4/28	15
BLOCK IX	Slides of Mexico in Ben's Basement	5/17	30 +

*Attendance Figures Not Available

ARTS AND CRAFTS

POTTERY:	Classes taught during October, November, January, February, April and May	45-50
PHOTOGRAPHY:	Student use -Darkroom -September, October, November, December, and February	35-40
STAINED GLASS WORKSHOP		10-15
CALLIGRAPHY	One Block	12
BASIC DRAWING	One Block	5

THEATER WORKSHOP

EVENT	DATE	ATTENDANCE
"The Lesson"	Oct.	750-850
"Hedda Gabler"	Nov.	750-850
"Under Milkwood"	Dec.	350
"Prisoner of 2nd Avenue"	Jan.	350-450
"Who's Afraid of Virginia Woolf"	Mar.	750-850
"The Playboy of the Western World"	May	375

APPENDIX D

YEAR	FRESHMEN APPS.	FRESHMEN ADMIT	FRESHMEN ENROLLED	TRANSFER APPS.	TRANSFER ADMIT	TRANSFER ENROLLED	ALL NEW STUDENTS TOTAL APPS.	ALL NEW STUDENTS TOTAL ADMITTED	ALL NEW STUDENTS TOTAL ENROLLED
78	2052	1085	530	520	200	132	2572	1285	662
77	2115	1181	584	500	171	113	2615	1352	697
76	2172	1060	543	557	224	157	2729	1284	700
75	2506	976	485	664	161	122	3170	1137	607
74	2701	1218	667	483	181	161	3184	1399	828
73	3050	936	475	530	185	122	3580	1121	597
72	3550	975	569	549	77	54	4098	1052	623
71	3510	945	516	563	115	87	4073	1060	603
70	3068	1090	545	328	100	68	3396	1190	613
69	2200	1043	516	208	111	76	2408	1154	592
68	1705	1012	534	198	105	75	1903	1117	609

NOTE: Freshmen figures include summer matriculants.
Transfer figures include January traffic.

APPENDIX E

SUSPENSIONS 1964 - 1979

Academic Year	1st Semester	2nd Semester	Total for Year
1964-65	12	37	49
1965-66	11	29	40
1966-67	21	27	48
1967-68	11	33	44
1968-69	15	19	34
1969-70	26	32	58
1970-71	7	7	14
1971-72	2	10	12
1972-73	5	3	8
1973-74	5	7	12
1974-75	5	8	13
1975-76	1	8	9
1976-77	3	12	15
1977-78	3	8	11
1978-79	3	6	9

ACADEMIC WARNINGS 1964 - 1979

1964-65	140	130	270
1965-66	119	109	228
1966-67	109	106	215
1967-68	132	122	254
1968-69	141	109	250

Beginning in September, 1969, probation was eliminated. New Warning status incorporates probation.

1969-70	124	146	270
1970-71	72	67	139
1971-72	49	88	137
1972-73	72	41	113
1973-74	32	50	82
1974-75	34	43	77
1975-76	37	30	67
1976-77	31	31	62
1977-78	24	20	44
1978-79	18	16	34

APPENDIX F

Omnibus Personality Inventory—Description Of The Scales

The Omnibus Personality Inventory is an instrument containing 14 scales (traits) designed to measure the differences among college students with regard to their attitudes, opinions, and feelings on a variety of subjects. Each of the fourteen scales is composed of a set of items which are correlates of the specific trait.

The student is asked to read each statement in the booklet and mark his responses on a separate answer sheet. He is instructed to mark TRUE if the statement is TRUE or MOSTLY TRUE for him, and FALSE if it is FALSE or NOT USUALLY TRUE as applied to him.

Brief definitions of the fourteen scales of the OPI are presented below, along with the letter symbols (in parentheses) and the number of items in each scale. The measured characteristic is generally defined in terms of a description of high scorers; the logical opposite of this description would, in most cases, characterize low scorers. Further descriptions, based on item responses consistently and most frequently made by high and by low scorers respectively, are given on pages 4-6.

The point at which any score may be defined as a high score is relative. The only common basis one can use across schools and sections of the country is the normative table. On most scales standard scores of 60 (84th percentile) or above are interpreted as sufficiently high for the essence of the respective definition to apply; persons whose scores fall above a standard score of 70 are seen as very appropriately characterized by the definition.

Definitions of the Fourteen Scales

1. Thinking Introversion (TI) - 43 items: Persons scoring high on this measure are characterized by a liking for reflective thought and academic activities. They express interests in a broad range of ideas found in a variety of areas, such as literature, art, and

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philosophy. Their thinking is less dominated by immediate conditions and situations, or by commonly accepted ideas, than that of thinking extroverts (low scorers). Most extroverts show a preference for overt action and tend to evaluate ideas on the basis of their practical, immediate application, or to entirely reject or avoid dealing with ideas and abstractions.

2. Theoretical Orientation (TO) - 33 items: This scale measures an interest in, or orientation to, a more restricted range of ideas than is true of TI. High scorers indicate a preference for dealing with theoretical concerns and problems and for using the scientific method in thinking; many are also exhibiting an interest in science and in scientific activities. High scorers are generally logical, analytical, and critical in their approach to problems and situations.

3. Estheticism (ES) - 24 items: High scorers endorse statements indicating diverse interests in artistic matters and activities and a high level of sensitivity and response to esthetic stimulation. The content of the statements in this scale extends beyond painting, sculpture, and music, and includes interests in literature and dramatics.

4. Complexity (CO) - 32 items: This measure reflects an experimental and flexible orientation rather than a fixed way of viewing and organizing phenomena. High scorers are tolerant of ambiguities and uncertainties; they are fond of novel situations and ideas. Most persons high on this dimension prefer to deal with complexity, as opposed to simplicity, and very high scorers are disposed to seek out and to enjoy diversity and ambiguity.

5. Autonomy (AU) - 43 items: The characteristic measured by this scale is composed of liberal, nonauthoritarian thinking and a need for independence. High scorers show a tendency to be independent of authority as traditionally imposed through social institutions. They oppose infringements on the rights of individuals and are tolerant of viewpoints other than their own; they tend to be realistic, intellectually and politically liberal, and much less judgmental than low scorers.

6. Religious Orientation (RO) - 26 items: High scorers are skeptical of conventional religious beliefs and practices and tend to reject most of them, especially those that are orthodox or fundamentalistic in nature. Persons scoring around the mean are manifesting a moderate view of religious beliefs and practices; low scorers are manifesting a strong commitment to Judaic-Christian beliefs and tend to be conservative in general and frequently rejecting of other viewpoints. (The direction of scoring on this scale was based chiefly on the correlation between these items and the first four scales, which measure a general intellectual disposition.)

7. Social Extroversion (SE) - 40 items: This measure reflects a preferred style of relating to people in a social context. High scorers display a strong interest in being with people, and they seek social activities and gain satisfaction from them. The social introvert (low scorer) tends to withdraw from social contacts and responsibilities.

8. Impulse Expression (IE) - 59 items: This scale assesses a general readiness to express impulses and to seek gratification either in conscious thought or in overt action. High scorers have an active imagination, value sensual reactions and feelings; very high scorers have frequent feelings of rebellion and aggression.

9. Personal Integration (PI) - 55 items: The high scorer admits to few attitudes and behaviors that characterize socially alienated or emotionally disturbed persons. Low scorers often intentionally avoid others and experience feelings of hostility and aggression along with feelings of isolation, loneliness and rejection.

10. Anxiety Level (AL) - 20 items: High scorers deny that they have feelings or symptoms of anxiety, and do not admit to being

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[1]When considering scores on the RO and AL scales with others, the student should make sure that the meaning of high and low scores is clearly understood; i.e., a high score on these two scales indicates less evidence of the trait while a low score indicates more of it.

nervous or worried. Low scorers describe themselves as tense and high-strung. They may experience some difficulty in adjusting to their social environment, and they tend to have a poor opinion of themselves. (Note the direction of scoring on this scale: a high score indicates a low anxiety level, and vice versa.)[2]

11. Altruism (AM) - 36 items: The high scorer is an affiliative person and trusting and ethical in his relations with others. He has a strong concern for the feelings and welfare of people he meets. Low scorers tend not to consider the feelings and welfare of others and often view people from an impersonal, distant perspective.

12. Practical Outlook (PO) - 30 items: The high scorer on this measure is interested in practical, applied activities and tends to value material possessions and concrete accomplishments. The criterion most often used to evaluate ideas and things is one of immediate utility. Authoritarianism, conservatism and non-intellectual interests are very frequent personality components of persons scoring above the average.

13. Masculinity-Femininity (MF) - 56 items: This scale assesses some of the differences in attitudes and interests between college men and women. High scorers (masculine) deny interests in esthetic matters, and they admit to few adjustment problems, feelings of anxiety or personal inadequacies. They also tend to be somewhat less socially inclined than low scorers and more interested in scientific matters. Low scorers (feminine), besides having stronger esthetic and social inclinations, also admit to greater sensitivity and emotionality.

14. Response Bias (RB) - 28 items: This measure, composed chiefly of items seemingly unrelated to the concept, represents an approach to assessing the student's test-taking attitude. High scorers are responding in a manner similar to a group of students who were explicitly asked to make a good impression by their responses to these items. Low scorers, on the contrary, may be trying to make a bad impression or are indicating a low state of well-being or feelings of depression.

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[2]See footnote 1.

APPENDIX G

We have been attempting a rather simple rating of faculty on this campus, as part of an effort to determine the effectiveness of the teaching of the faculty in general at Colorado College. The best source for such ratings are faculty who have been on campus for some years and through their varied involvements on the campus have a broader experiential basis to make appraisals of their colleagues. Recognizing that such appraisals have to be based largely on second-hand information, not having had the opportunity to visit the classrooms of many others, and also on some subjective, and less subjective, impressions drawn from personal contacts, committee activity, etc., we still ask you to rate all faculty members, or all others for whom you have any basis for assessing their role as teachers.

Your efforts and ratings will not be identified, and will be destroyed, after combining them with the ratings of eight of your colleagues.

We ask you to look over the enclosed list of faculty members and assign one of the rating categories in the left hand margin to each person as follows (skipping those few who are no longer here):

E = Excellent

Based on such things as continuing, high-level performance in the classroom and in individual work with students. Academically sound, scholarly, committed to the discipline and to teaching; stimulating, sensitive to students, and oriented to their learning. Also strong, contributive efforts in behalf of the college academic program.

AA = Good to Above Average

Recognized and generally respected as a good to very good teacher. "Knows his/her stuff," although quality of instruction and the reception of it may vary with courses taught. Prepares for teaching, involves students in the teaching-learning process, sensitive to student needs and gives time to working with them.

A = Average

Just that, average, not particularly good but never bad. Generally works hard but personality style, or certain attitudes may serve to attenuate performance and/or general effectiveness. Not always prepared and caters to certain students. In some cases, little effort given to teaching, but getting job done.

BA = Below Average to Poor	Inconsistent performance. Known for not working hard; seemingly poorly prepared. Objectiveness often not clear or not pursued. Showing little concern for teaching or the students.
P = Poor	Consistently poor or inadequate performance. Often boring, or certainly not stimulating, not capable of involving most students' thinking. In some cases, a lack of preparation or concern. Tends to be shunned, or at least not sought out by students for teaching or academic reasons.

An evaluation of the Colorado College Plan was recommended during the course of the first year, following its inception in the fall of 1970. Near the end of that year, an initial survey was conducted of the faculty and student body in the attempt to obtain a general campus reaction to the Plan and its functioning. The success of this initial sampling of the opinions and reactions of both teachers and students served as a precedent for a series of similar surveys in the ensuing three years. The results of the surveys were very confirmative of the general success of teaching and learning under the single-course format and encouraging of the continuation of the Plan.

In the course of those early years, the College administration decided to supplement the surveying of the campus constituency by the implementation of further evaluation, addressed to a wider composite of the College's functioning under the Block Plan. A proposal to effect a long-range research address to a number of the components of the college was invited and later approved during the 1972-73 school year. The first of a variety of studies and projects of the extended evaluation program was begun in the fall of 1973. This initial venture, with a focus on the students, was one of several that was pursued over a number of years; other projects, some conducted intermittently, ran from several months to the better part of a year.

A mere listing of studies and projects is not adequate to clarifying the objectives, scope and complexity of the various research efforts, but it can be generally illustrative of the diversity of concerns and approaches. As might be expected from any evaluative research on liberal arts programs, major attention was directed to faculty and students, with the most extensive approach devoted to the latter. A list of the major studies follows.

A. Study of two classes--entrants of 1973 and 1974.

1. Assessments at beginning and near end of the four years (70 percent samples)

a. Goals, aspirations, expectations, career plans.

b. Values, attitudes, opinions.
c. Intellectual disposition (interest in and readiness for learning).
d. Personality characteristics--relevant to academic life.
e. Knowledge in the liberal arts areas (only 1974 entrants).

2. Samples in each class interviewed about campus life and student culture.

3. Samples (other than above - 2) in each class interviewed about reactions to program, academic demands, problems and frustrations.

4. Small selected subsamples of upper-classmen interviewed about general satisfactions, academic gains, education abroad experiences, etc.

5. Random samples of seniors (in three graduating classes; 50 per class) given "orals" examinations by visiting faculty.

B. Student reactions to instruction and classroom experiences (school years 1972-73 and 1973-74)

1. Small groups of students (5 to 8 per group), selected to represent three major divisions, interviewed as a group regarding most contributive and least contributive courses taken during the preceding blocks (approximately 12 groups each year).

C. Studies of the faculty

1. Through a variety of student reports via some of the student interview samples listed above (under student research).

2. Through the senior questionnaires administered near the end of the fourth years (graduating classes of 1977 and 1978).

3. Through the luncheon discussions (1972-73 and 1973-74) with small groups of the faculty, selected to represent the three major disciplinary areas--directed chiefly to adaptations under BP and changes in teaching styles and classroom activities.

4. Through two samples of the faculty (15 /sample) interviewed about their academic and on-campus activities--one group interviewed in 1974-75 and the second in 1976-77.

5. Through interviews with new faculty members (employed since 1975) during the 1977-78 year.

6. Through a rating of all faculty members on instructional effectiveness and classroom performance--in the spring of 1976.

7. Through intensive interviews of a random sample of faculty members (30 persons) by an "outside" interviewer during the 1977-78 school year--about the totality of their lives and experiences under the Block Plan.

8. Through a study of faculty participation on college committees over a period of five years.

9. Through the final questionnaire survey of the total faculty in the late spring of 1978.

D. Observational study of classroom activity, teaching styles and faculty--student interaction.

1. Through classroom visits (40 classes, each visited twice) by neutral observers in 1976-77 and 1977-78. Half of the classes were designated to insure an adequate "sampling" of classes in the three major disciplinary areas, and the other half were drawn at random from the courses available in a three-four block period.

E. Analysis of transcripts for the graduates of 1968, 1974, and 1977--to determine the course concentration within students' major fields and the distribution of other courses across the major disciplinary areas.

F. Study of student involvement in leisure and extra-curricular activity (activities, sports, the arts, and cultural events).

G. Study of "withdrawals" and reasons for leaving.

H. Study (via interviews) of transfer students--after three or more blocks on campus.

I. Survey of the alumni (40% samples) of the graduating classes of 1960, 1965, 1970, 1972 and 1975.

J. Study of curricular developments and changes--since 1960--at Colorado College and eight of the ACM colleges--examining the extent of and substance of the changes.

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